INDEPENDENT EVALUATION DIVISION
OFFICE OF EVALUATION AND INTERNAL OVERSIGHT

Independent Terminal Evaluation

GLOBAL

STRENGTHENING THE LOCAL PRODUCTION OF ESSENTIAL MEDICINES IN DEVELOPING COUNTRIES THROUGH ADVISORY AND CAPACITY-BUILDING SUPPORT - Phases 4-6

UNIDO Project ID: 120117, 130209, 140292, 160189, 160202

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Abbreviations and acronyms

Abbreviation	Meaning
AFRO	WHO African Regional Office
AIDS	Acquired Immunodeficiency Syndrome caused by the Human Immunodeficiency Virus (HIV)
AUC	African Union Commission
AU	African Union
AVMI	African Vaccine Manufacturing Initiative
BA	Business Association
BIRS	Biotechnology, Innovation and Regulatory Science
BP	Business Plan
CAPA	Corrective Action /Preventive Action
DC	Developing Country
EAC	East African Community
EFDA	Ethiopian Food and Drug Authority
ECOWAS	Economic Community of West African States
ERPP	ECOWAS Regional Pharmaceutical Plan
FAPMA	Federation of African Pharmaceutical Manufacturers Associations
FDI	Foreign Direct Investment
FKPM	Federation of Kenyan Pharmaceutical Manufacturers
FMHACA	Food, Medicine and Health Care Administration and Authority, formerly known as the Drug Administration and Control Authority in Ethiopia
GIZ	Gesellschaft für Internationale Zusammenarbeit
GMP	Good Manufacturing Practices
GNI	Gross National Income
HIV	Human Immunodeficiency Virus
HQ	Headquarters
HR	Human Resource
HVAC	Heating, ventilation, and air conditioning
ICH	International Conference on Harmonization
ICTSD	International Centre for Trade and Sustainable Development
IFC	International Finance Corporation
ICGEB	International Centre for Genetic Engineering and Biotechnology
IPAT	Industrial Pharmacy Advanced Training Programme

Abbreviation	Meaning
iPMIS	integrated Pharmaceutical Market Information System
IR	Inception Report
KPSDS	Kenya Pharmaceutical Sector Development Strategy
KSP	Kilimanjaro School of Pharmacy
LDC	Least Developed Country
LIC	Low-Income Country
LMIC	Lower Middle-Income Country
LPP	Local Pharmaceutical Production
MCAZ	Medicines Control Authority of Zimbabwe
MIC	Ministry of Industry and Commerce
MIS	Market Information System
MOH	Ministry of Health
MOF	Ministry of Finance
MOITC	Ministry of Industry, Trade and Cooperatives
MOTI	Ministry of Trade and Industry
MOU	Memorandum of Understanding
NDPC	National Development Planning Commission
NMRA	National Medicine Regulatory Agency
PMA	Pharmaceutical Manufacturers Association
PMAG	Pharmaceutical Manufacturers Association of Ghana
PMPA	Pharmaceutical Manufacturing Plan for Africa
QA	Quality Assurance
PPB	Pharmacy and Poison Board
RBM	Results-based Management
SAGMA	Southern African Generic Medicines Association
SLF	Saint Luke Foundation
SMART	Specific, Measurable, Achievable, Realistic and Time-bound
TE	Terminal Evaluation
TGF	The Global Fund
ToR	Terms of Reference
TP	Technology Platform
TRIPS	Trade-related Aspects of Intellectual Property Rights
TT	Technology Transfer or Tech Transfer
UN	United Nations

Abbreviation	Meaning
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNGA	United Nations General Assembly
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNITAID	UNITAID is an international organisation that invests in innovations to prevent, diagnose and treat HIV/AIDS, tuberculosis and malaria. UNITAID is hosted and administered by WHO
UMIC	Upper Middle-income Country
US	United States
USD	United States Dollars
USP	United States Pharmacopeia
WAHO	West African Health Organization
WHO	World Health Organization
WHO HQ	World Health Organization Headquarters
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

GLOSSARY OF EVALUATION-RELATED TERMS*

Term	Definition
Conclusions	Conclusion is based on data collection and analyses and points out the factors of success and failure with special attention paid to the intended and unintended results and impacts.
Effectiveness	A measure of the extent to which the development intervention's objectives were achieved, or are likely to be achieved, with considerations given to the major factors influencing the achievement or non-achievement of the objectives.
Efficiency	A measure of how economically inputs, including financial and human resources, expertise, time, etc., are converted into qualitative and quantitative outputs, outcomes and desired results.
Essential medicines	Essential medicines are those that satisfy the priority health care needs of the population.
Impact	The primary and secondary, positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators.
Indicator	Indicators are measurable quantitative or qualitative information used to measure achievement and determine whether a programme/project was implemented/ is being implemented as expected and achieving their expected outcomes. They reflect the changes connected to an intervention, or to help assess the performance of a development actor.
Lessons learnt	Generalizations are based on observation(s) or experience gained from a programme or project which can be translated into relevant, beneficial knowledge to broader situations by establishing clear causal factors and effects. It focuses on a specific design, activity, process or decision and may provide either positive or negative insights on operational effectiveness and efficiency, impact on the achievement of outcomes, or influence on sustainability.

* Definition of main evaluation concepts based on OECD DAC Guidelines

Term	Definition
Logical framework/ Logframe	Logframe is a tool, based on the project's theory of change, and used to improve the design of interventions, most often at the project level. It involves identifying strategic elements; inputs, outputs, outcomes, impact and their causal relationships; and expressing the intervention logic of a programme/project. The logframe is often presented in a matrix and includes the results-chain (output, outcomes and impacts), indicators, baselines and targets as well as the assumptions or risks that may influence success and failure.
Outcome	The likely or achieved short-term and medium-term change and effects of intervention outputs.
Outputs	The products, capital goods and services which result from development interventions.
Recommendations	Proposals, firmly based on evidence and analysis and follow from the evaluation findings and conclusions and aimed at enhancing the effectiveness, efficiency and quality of development interventions. Depending on the state of the programmes/projects they may include redesigning the objectives and/or reallocating resources.
Relevance	The extent to which the objectives of a development intervention are suited to the needs, requirements, priorities and policies of the target groups, direct and indirect beneficiaries and donors. Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
Results	The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention, with each element contributing to the next and thus creating a results chain.
Results-Based Management (RBM)	RBM is a broad management strategy aiming at improving management effectiveness and accountability by defining realistic expected results, monitoring progress toward their achievement, integrating lessons learned into management decisions and reporting.
Sustainability	The continuation of benefits from a development intervention after donor funding has been withdrawn. Programmes/projects need to be sustainable environmentally and financially.

EXECUTIVE SUMMARY

Introduction

The purpose of the evaluation is to assess the overall performance and results of project *Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support* through phases 4-6 and identify its main achievements and challenges, lessons learnt as well as provide recommendations for future efforts at national, regional and global levels.

Background

With the long-term support from the German Government, UNIDO started a global project in 2006 to strengthen the production of essential medicines in developing and least developed countries. The first three Phases of the Project were implemented from 2006 to 2012 with a budget of EUR 3.3 million. It aimed at improving the production of quality-assured essential medicines for the treatment of HIV/AIDS, tuberculosis and malaria. The last three Phases saw an extension/expansion towards essential medicines at large, covering both communicable and non-communicable diseases – with a focus on generics.

The last three Phases of the Project were implemented from 2012 to 2019 with a total budget of EUR 9 million. The pharmaceutical industry is complex, highly capital intensive and requires that the facilities are built, and processes are designed and maintained to conform to rigorous international standards. Local pharmaceutical production (LPP) contributes to improving availability, accessibility and in most cases affordability of high-quality essential medicines and thereby improving the health status of the population in developing countries. Furthermore, the pharmaceutical industry creates jobs and increases revenues therefore contributing to economic growth; and the transformation of societies.

Evaluation approach and methodology

The evaluation was conducted in a participatory environment, in accordance with the Terms of Reference, the UNIDO Evaluation Policy, UNIDO Evaluation Manual and other international standards and guidelines on evaluation.

The evaluators used a combination of methods in order to answer the evaluation questions adequately. Data have been collected by different means and from several sources, including desk review, interviews, focus group discussions and observations during country visits. Data collected from primary and secondary sources were analysed and the responses were summarized by classifications. The evaluators identified patterns, occurrences and phrases that were significant or repeated among the contents from data sources. Recommendations were formulated in a forward-looking mode and lessons learnt were extracted.

Summary of the main findings by evaluation criteria

Relevance

The Project aimed at improving the operating environment for commercially viable production of safe, efficacious and quality-assured medicines for treating HIV/AIDS, tuberculosis, malaria; and highly prevalent non-communicable diseases.

The overall assessment on the relevance of the Project was highly satisfactory. The Project and its activities were timely and in alignment with the target countries' national development priorities as well as the mandates of UNIDO and WHO. In line with UNIDO's mandate the project promoted industrial development for poverty reduction, inclusive globalization and environmental sustainability. The holistic approach supported the governments in creating an enabling environment through developing industrial policies for the pharmaceutical sector; strengthened regulatory capacities; supported the establishment of regional associations of pharmaceutical manufacturers; provided technical assistance in assessing and implementing GMP (Good Manufacturing Practice) at pharmaceutical companies; and provided training opportunities.

Effectiveness

The evaluation found that attention was given to creating effective strategic partnerships with regional international organizations, national governments and other actors for the planning, coordination and implementation of the project activities. The Project supported the target countries in developing country-specific, risk-based and phased roadmaps towards international GMP standards. It was successful in initiating changes, which, within a few years, are likely to result in full compliance with the World Health Organization's (WHO) Good Manufacturing Practice (GMP) at several pharmaceutical companies based in Africa.

A software, integrated Pharmaceutical Market Information System (iPMIS), was developed for collecting marketing data from the pharmaceutical companies based in the target countries. However, due to misunderstanding and mistrust this sub-project was only partially successful. The database, managed by the Secretariat of EAC (East African Community), is still incomplete and there is apprehension among manufacturers about regular and systematic sharing of their production and sales data.

In summary, most of the targeted objectives were met, the majority of the activities were effective and the positive benefits on the target groups are obvious.

Efficiency

In terms of efficiency, the picture that emerged is less positive than as per the relevance criterion, but still positive, with the majority of the activities having been implemented efficiently and satisfactorily. A risk-based, phased approach was developed and used for assessing the WHO GMP compliance of pharmaceutical manufacturers. The assessment had a high outreach covering more than a hundred companies.

The evaluation found that management decision-making and the management of operations (planning, execution and reporting) were not always executed in a timely manner which resulted in delays. Cost-free extensions were requested for each Phase for implementing all planned activities and achieving the objectives.

Sustainability

Overall, the findings from the evaluation show a positive picture indicating that most of the results and benefits would continue after completion of the Project.

The member states of EAC are committed to develop their pharmaceutical industry and recognized the strategic importance of the local production of medicines. A Joint Declaration signed by UNIDO and the West African Health Organization (WAHO) states

the intention of the two organizations to work together to develop the pharmaceutical industry in West Africa.

While the ownership of the Project's results and the commitment to the objectives vary from country to country and from activity to activity the majority of the results are likely to be sustained.

Impact

The Project exploited the political willingness and commitment of the target governments and contributed to the creation of enabling environment for the pharmaceutical industry. GMP Roadmaps were developed and the GMP compliance of the pharmaceutical companies was assessed. This increased the desire for obtaining WHO pre-qualification at numerous pharma companies in the region. The construction of 14 new pharmaceutical plants was reported and a few pharmaceutical products have already received WHO prequalified status. Compliance with WHO GMP regulations increases the export potential of the companies and, in conjunction with one or more prequalified product(s) or products approved by a stringent regulatory authority makes them eligible to submit offers to international donors for delivering medicines procured by them[†].

The training programmes have positive effects on the regulatory agencies, industry and the individuals who participated in them by increasing their knowledge in GMP and for regulatory staff by providing hands-on experience as well. The findings show that the activities of the Project contributed to laying the foundations for longer-term improvements. Most of the pharmaceutical manufacturers are still in the stage of investing into plants and process improvements, therefore the sector's economic performance has not improved much yet, but it is anticipated that the Project will contribute to delivering long-term social, economic and health impacts in the long run.

Gender

The extent to which the Project addressed gender was also explored. Gender-sensitive data were collected and analysed during the implementation of the Project. Data show that among those who participated in the trainings a relatively good gender balance was achieved while among the implementers there was a male dominance. It must be noted that improving access to essential medicines per se does not imply any gender dimension.

Conclusions

In general, the Project was well conceived, showing commitment to the Sustainable Development Goals as well as to UNIDO's vision and mission; and fulfilled its objectives, with the exception of iPMIS which was only partially completed.

The project has performed well in all evaluation criteria, especially when taking into account the challenges and obstacles, the varied political willingness and commitments, and the differences in the legal and economic environment of the countries where the Project was implemented. In several cases changes in the governments lead to shifts in

[†]The WHO Prequalification Team assesses information submitted in support of a particular pharmaceutical product to determine whether that product meets the requirements and standards for WHO prequalification. Before prequalification is granted to a pharmaceutical product WHO inspect the relevant manufacturing site(s) to assess compliance with WHO Good Manufacturing Practice (GMP).

the priorities and thus caused new, unexpected challenges. Actions to resolve them required diplomatic tact, sensitization, re-organization of the Project activities and to apply other measures.

The delivery of the Project demonstrated what can be achieved with a relatively small budget in several countries. The results of the Project across countries showed not only what can be achieved, but how it can be done employing a combination of a holistic and stepwise approach.

The project did welcome cooperation with other multilateral agencies and thus demonstrate how technical expertise and comparative advantages of the UN agencies can leverage the delivery of a development cooperation project.

Among the factors contributing to the success of the Project, the two most important ones are: UNIDO's experience and expertise gained over the years that has made the Organization a key actor of this agenda at international level; and the sound, albeit implicit theory of change. Several other factors contributed to the success of the Project, including the technical expertise and experience of the UN Partners, focus on capacity building, hiring outside experts with expertise not available at the implementing partners and strong focus on the self-evaluation.

However, there were areas where improvements could have been made to further enhance performance. The weaknesses identified were mostly related to the implementation and difficulties in addressing changes occurring at national level. While considerable amount of effort was allocated to engage the local stakeholders, the results show that more time, efforts and attention should have been given to this issue in order to gain better ownership. Some stakeholders perceived the Project a "UNIDO Project" rather than a "UNIDO-funded Project of the country/region".

Communication was weak and it did not reach a wide range of stakeholders. Thus, it did not result in the desired awareness of the Project's results and benefits.

In one beneficiary country the lack of a pre-defined management structure and processes lead to delays in the decision-making on several occasions, furthermore the re-establishment of the smooth implementation of the Project required more efforts.

Recommendations

A. Recommendations to the national governments and regional organizations

Harmonize the registration processes and establish a regional level regulatory agency

- *It is recommended to support the on-going initiatives towards a unified approach and establishing a regional regulatory agency by using the elements which already exist. The progress made by the African Medicines Regulatory Harmonization initiative (AMRH) in the EAC could serve as a basis for this approach. (Another ambitious recent project made progress towards the creation of the African Medicines Agency (AMA). Currently each EAC country has its individual product registration system and inspection processes, therefore, access to the regional market is too expensive and thus, limited for most manufacturers.*

Support the pharmaceutical industry to gain access to financial resources

- *It is recommended to strengthen the support to the local pharmaceutical industry in accessing loans from international banks and other sources. The need for essential medicines in developing countries and globally is foreseen to increase so the potential for pharmaceutical companies producing quality-assured medicines to enter the international market is high.*

Increase the engagement of the pharmaceutical industry and the regulators to support iPMIS

- *It is recommended to commit further efforts to overcome the mistrust related to iPMIS by demonstrating strong commitment from the governments' and international organizations' side on the confidentiality of data in iPMIS and their non-availability to external actors.*

B. Recommendations to the Donor and UNIDO

Increase the timeframe of future projects

- *It is recommended to increase the timeframe of future projects in this sphere from three years to five years. The three-year timeframe does not allow sufficient consultation with the stakeholders at appropriate level at design phase and feed their inputs into the development of future project plans. The longer timeframe would lead to better planning and may decrease the number of requests for cost-free extensions.*

C. Recommendations to UNIDO and the national governments

Map systematically the potential donors

- *It is recommended to conduct a systematic mapping of actors, donors and other stakeholders who are important players in the pharmaceutical industry development, have comparative advantages in it, can support this agenda, and/or work at the interface of the pharmaceutical industry and public health and who are either potential donors or can assist UNIDO or the national governments in resource mobilization.*

D. Recommendations to UNIDO

Assign more time to stakeholder consultation

- *It is recommended to allocate more time and effort for the design phase of a project for the stakeholder consultation, gathering their inputs and feed them into the development of the new project. It is also recommended to make the process iterative; and consider to use an online platform which would be open to the stakeholders to comment on the proposal(s) and add inputs.*

Deploy UNIDO staff at the main project sites

- *It is recommended to deploy at least one permanent UNIDO/project staff at the target countries who would work with the local partners on a day-to-day basis and deal with the concerns raised by local stakeholders more effectively. One committed, full time UNIDO/ project staff at each target country can contribute to shaping the design with country-specific inputs from the local stakeholders and participate in the implementation as well.*

Pay attention to potential bottlenecks at the design

- *It is recommended to pay attention to identifying potential bottlenecks of future projects, such as varied political and industry willingness, commitment to adopt strategies like the iPMIS, and the availability of experts at the design phase and identify appropriate measures to take actions if needed.*

Improve communication

- *It is recommended to develop a targeted communication strategy at the design phase of future projects in order to raise the awareness of the project from its outset. The preferred communication means and channels of each stakeholder group should be used.*

Disseminate the results of this Project

- *It is recommended to disseminate the national level results of the Project across the target countries and thus sharing good practices.*

Lessons learnt

- *The holistic approach applied by UNIDO to address the lack of effective, quality-assured essential medicines in Africa and thus, improving the availability, accessibility, and affordability of those medicines proved to be successful.*

- *To increase the effectiveness and sustainability of regional or global projects like this, it is necessary to have a formal understanding, such as Memorandum of Understanding (MOU) signed with the respective ministry of the target country.*

- *Sustaining the results and the benefit of the Project will not be possible without financial resources for providing the specialized trainings to the new employees of the regulatory agencies and the pharmaceutical industry and refresher training for those who have already been working there.*

1. INTRODUCTION AND BACKGROUND

1.1. Project description

With the long-term support from the German Government, UNIDO started a global project in 2006, to strengthen the production of essential medicines in developing and least developed countries. Over the past 13 years, UNIDO has built significant expertise in this sector and is recognized as one of the leading international organizations driving this agenda. The *Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support* project significantly contributes to the production of high-quality essential medicines in developing and least developed countries, and thus to achieving the 2030 Agenda for Sustainable Development.

The pharmaceutical industry is complex, highly capital intensive and requires that the facilities are built, and processes are designed and maintained to conform to rigorous international standards. Furthermore, the array of different product types and the multiple stakeholder groups, including governments, regulators, associations of pharmaceutical companies, pharmaceutical product manufacturers, health care service providers, the need to collaborate at national, regional and international levels make the processes and the industry even more complex.

Local pharmaceutical production (LPP) contributes to improving availability, accessibility and in most cases affordability of high-quality essential medicines and thereby improving the health status of the population in developing and least developed countries. Furthermore, the pharmaceutical industry creates jobs and increases revenues therefore contributing to economic growth; and the transformation of societies.

The UNIDO project has achieved progress and milestones in several fields:

1. UNIDO partnered with the African Union Commission (AUC) in writing the business plan (BP) for the accelerated implementation of the Pharmaceutical Manufacturing Plan for Africa (PMPA), which has been endorsed by the African Union Heads of State and Government.

2. UNIDO has been engaged in many global forum activities and in collaboration with other United Nations (UN) and non-UN agencies promoted the LPP agenda.

3. UNIDO has developed approaches for assisting governments to formulate pharmaceutical industry sector development strategies and roadmaps; and companies to draft their business proposition to attract investment and/or technology; to upgrading standards of production and technical support packages for the industry to improve production efficiency.

4. UNIDO has worked closely with the private sector, reaching out to some 120 companies operating in sub-Saharan Africa, out of an estimated 350-400 continent-wide.

5. UNIDO has provided guidance to the pharmaceutical industry in developing their manufacturing activities, by Q2/2019 assessed the compliance of 108 companies

with international good manufacturing practices (GMP); and provided training in international requirements of GMP for public and private sector staff.

6. Following the signing of a Joint Declaration in 2018, in May 2019 UNIDO and the West African Health Organisation (WAHO) signed a Relationship Agreement stating the intention of the two organizations to work together to develop the industry in West Africa.

7. UNIDO has expanded its work to include vaccines and biologicals. With partner organizations UNIDO has assessed the viability of vaccine manufacturing in Africa and produced two White Papers: one on the considerations to be taken into account when putting in place a vaccine manufacturing facility, the other a case study on the commercialization of vaccines production in the sub-Saharan African context.

8. UNIDO is exploring opportunities to utilize the expertise of the International Centre for Genetic Engineering and Biotechnology (ICGEB) to develop biosimilar production in Africa.

9. UNIDO in 2019, published a document providing guidance on promoting pharmaceutical production in Africa. This document is publicly available for download on the Internet and contains advice for government policy makers, the private sector, development partners and development finance institutions on the promotion of pharmaceutical production.

The total budget of the three last Phases of the Project was EUR 9 million.

2. EVALUATION OBJECTIVES, METHODOLOGY, PROCESS AND BACKGROUND

2.1. Evaluation purpose, goals, scope and proposed solution

This report presents the findings, conclusions, recommendations and lessons learned of the independent terminal evaluation of the *Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160189, 160202 project* hereafter referred to as the UNIDO project or the Project. The very first Phase of the Project started in 2006 with a financial contribution from the Government of Germany and aimed at improving the production, availability, accessibility and affordability of quality-assured essential medicines for the treatment of HIV/AIDS, tuberculosis and malaria. After the completion of Phase 3 of the Project the focus was expanded towards the strengthening of local production of essential medicines at large, thus including chronic non-communicable diseases. The purpose of the evaluation is to assess the overall added value of the Phases 4-6 of the Project and identify its main achievements and challenges, lessons learnt as well as provide recommendations for future efforts at national, regional and global levels.

As specified in the Terms of Reference (ToR), the overall purpose of this terminal evaluation is to assess whether the project has achieved its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. In addition, to assess the degree to which the recommendations of the previous evaluations have been accounted for.

Based on the aforementioned purpose the goals of the terminal evaluation are multi-fold:

- To assess the project performance against the evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact;

- To draw lessons and develop recommendations for the donor, UNIDO, governments, stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

2.2. Timeframe

This terminal evaluation was carried out from March 2019 to November 2019 and covered Phases 4 through 6 of the Project, which were implemented from January 2013 to June 2019 including a six months cost-free extension. Under the terminal evaluation missions were conducted to Austria, Ghana, Kenya, Switzerland, Tanzania and Zimbabwe in late May and early June 2019. The first three Phases of the Project had been evaluated by another team of experts from November 2009 to January 2010.

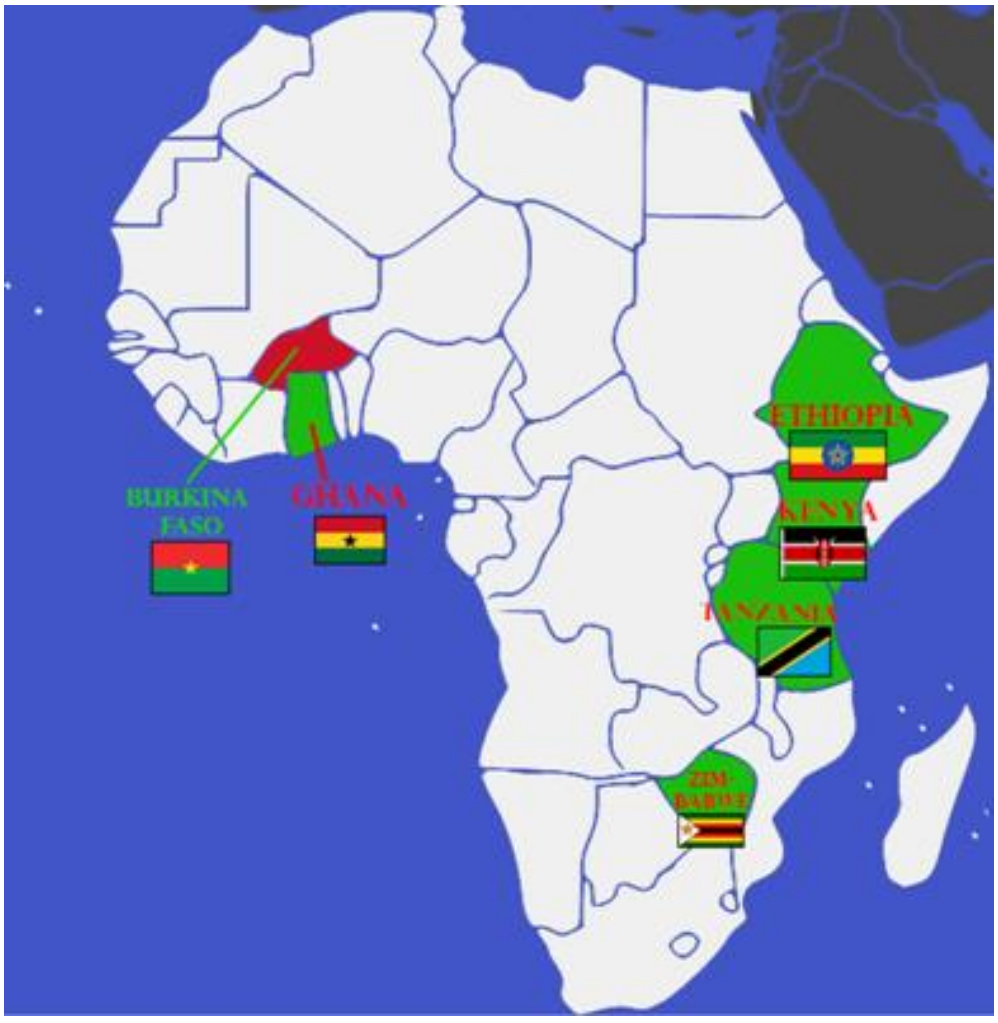
The terminal evaluation team consisted of two experienced evaluators, Dr Agnes Czimbalmos, evaluator, medical doctor and psychologist, public health expert; and Ms Enid Kaabunga, evaluator and pharmacist.

2.3. Scope of the Evaluation

Geographical scope

Several countries participated in the implementation of Phases 4-6 of the Project and benefitted from it. They are Ethiopia, Ghana, Kenya, Myanmar, Nigeria, Tanzania, Vietnam and Zimbabwe. This terminal evaluation focuses on Ethiopia, Ghana, Tanzania, Kenya and Zimbabwe. The East African Community, based in Arusha, Tanzania, and the West African Health Organization, based in Bobo-Dioulasso, Burkina Faso also participated in the implementation of the Project.

1. Figure Map of Africa showing the project countries



2.4. Gaps in documentation and other limitations

Contact information (names and email addresses) for key informants and focus group members at national and regional level has been received from UNIDO. However, due to changes in the governing parties being in power in the target countries over the years of

the Project implementation several key counterparts were no longer in the same position at the time of the evaluation and their availability for an interview was limited.

Safety and security issues prevented the evaluators to conduct face-to-face interviews at the West African Health Organization in Bobo-Dioulasso, Burkina Faso, and in Addis Ababa, Ethiopia.

2.5. Intervention logic

Theory of Change

Since no Theory of Change was developed at the project design, the evaluators developed one based on the key documents provided, including the Logical Framework (Logframe).

According to recent studies one third of the world's population still lacks timely access to quality-assured essential medicines while estimates indicate that at least 10% of medicines in low- and middle-income countries (LMICs) are substandard or falsified[3]. The project initiated by UNIDO addressed this issue at global level and supported developing countries in Asia and Africa, with a particular focus on Sub-Sharan Africa, in increasing local capacities for producing safe, efficacious and quality-assured essential medicines for improving the availability and affordability of such products taking advantage of the TRIPS Agreement's exemption on least developed countries (LDCs). The first Phase of the Project focused on improving access to quality-assured essential medicines against the three pandemic diseases, HIV/AIDS, malaria and tuberculosis in LDCs. From the second Phase of the Project there was a shift to essential medicines against other disease groups with high prevalence, such as cardiovascular diseases, diabetes, epilepsy and cancer. This shift reflected lessons learnt in Phase 1, notably the finding that the potential for commercial viability was likely to be bigger if the focus was enhanced towards manufacturing of essential medicines at large in Africa.

It is expected that the local production of quality-assured essential medicines improves the availability and accessibility of those medicines and lead to improved health status of the population. Furthermore, it can decrease the prevalence of sub-standard or falsified medicines thus further improving the population's health status. Another benefit could be that the quality-assured medicines improve confidence in medical products and health care services and ultimately in the health systems.

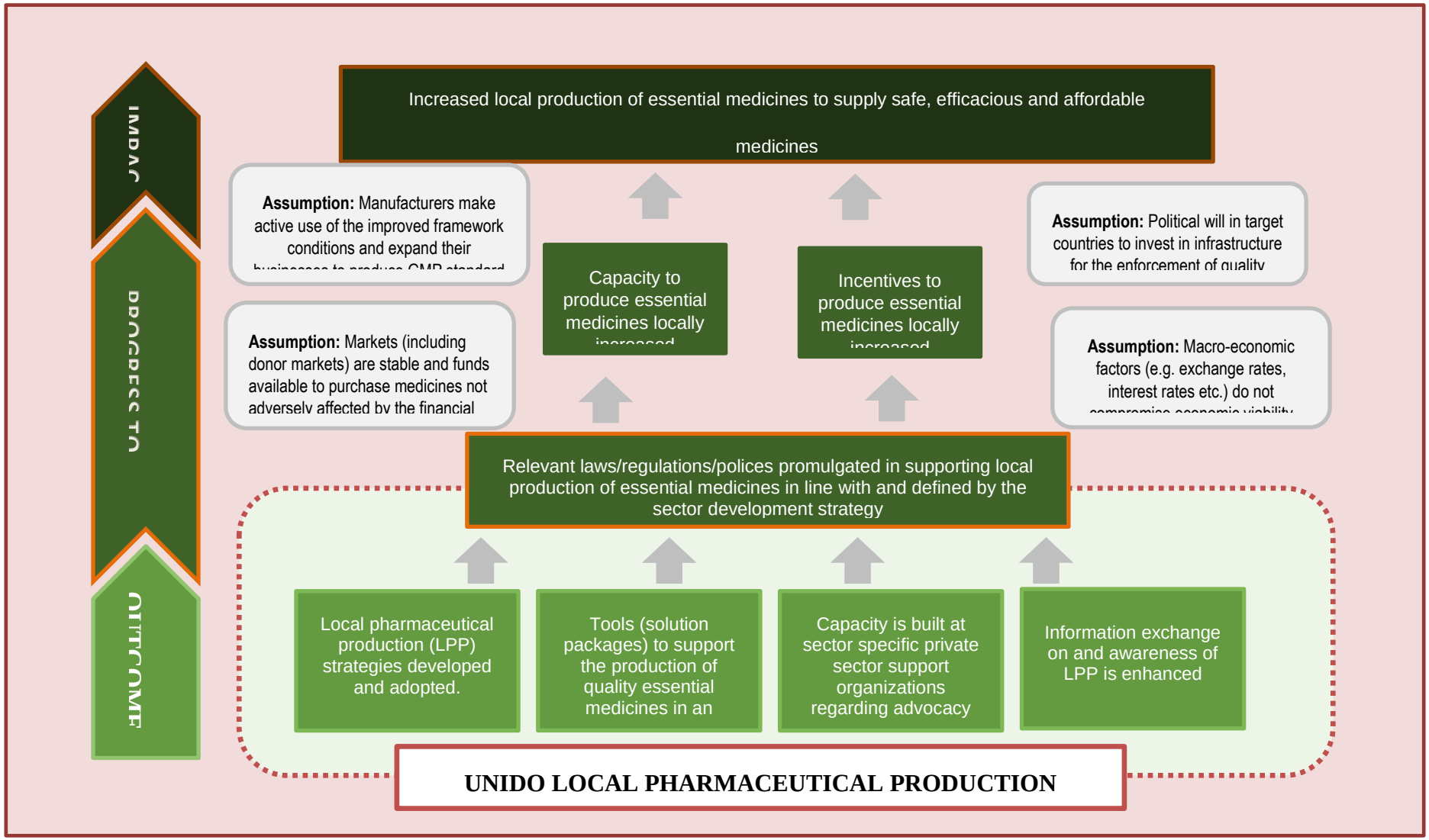
Local pharmaceutical production requires highly qualified and skilled staff at the regulatory agencies, and at the pharmaceutical companies. Up-to-date knowledge of the current good manufacturing practices (GMP) is one of the crucial elements of the production of quality-assured medicines. Local production of essential medicines contributes to the economic growth of the target countries and increases their revenues.

It must be noted that during the first three Phases of the Project, which is not the subject of this evaluation, developing and least developed countries, based on their expressed interest, were selected to participate in the Project. Due to limited regulatory and pharmaceutical production capacity in the least developed countries the last three

[3] https://www.who.int/news-room/detail/28-11-2017-1-in-10-medical-products-in-developing-countries-is-substandard-or-falsified assessed 30 June 2019

Phases were implemented only in developing countries. However, trainees from least developed countries also benefitted from the training at SLF/KSP in Moshi or the WAHO regional project which covered all 15 ECOWAS Member States.

2. Figure Theory of Change



3. EVALUATION CRITERIA

3.1. Methodology

The detailed methodology is provided in Annex 2.

The evaluation has been executed in a participatory manner, in accordance with the Terms of Reference, supported by the UNIDO Independent Evaluation Division, the contracted evaluators and key stakeholders and implementers, while ensuring the independence of the evaluation from the project management unit.

The evaluators used a combination of methods in order to answer the evaluation questions adequately. Data have been collected by different means and from several sources, including desk review, interviews, focus group discussions and observations during country visits.

A purposeful sampling was applied for selecting interviewees and focus group participants from different stakeholder groups, in consultation with UNIDO Independent Evaluation Division. This approach is proposed in lieu of a stratified random sampling because of personnel changes since the beginning of the Project and uneven implementation of the Project actions across the target countries and regions.

The comprehensive Evaluation Matrix (Annex 3) provided a detailed characterization of the evaluation questions and sub-questions, facilitated the development of the evaluation tools and allowed more meaningful data analysis. The data collection tools, instruments and protocols are presented in Annex 5.

While the ultimate aim of the Project was the same in all target countries, the varying context and situations of the different countries affected the availability, quality and comparability of data. Due to the lack of baseline data or survey no comparative end-line survey was possible to employ. Data reliability and validity were enhanced by using multiple lines of evidence and triangulating the available data.

Data collected from all primary and secondary sources were analysed and the responses were summarized by classifications, such as country, name of the activity, outcomes, indicators and impacts. The evaluators identified patterns, occurrences and phrases that were significant or repeated among the contents from data sources. Recommendations were formulated in a forward-looking mode and lessons learnt were extracted.

3.2. Key Findings

Performance by Evaluation Criteria

Relevance

Relevance, in general, has a multi-dimensional nature. In this case relevance has several sub-criteria because the UNIDO Project was at the interface of pharmaceutical industrial development and public health and the activities were conducted at macro-, meso- and

micro level, including policy, strategy and roadmap development; and capacity development at regional, national, organizational and industry level.

The project addressed the urgent need of production of quality essential medicines for Africans by Africans.

Source: Project stakeholder interviewed by the evaluation team.

The Project advocated a holistic approach to enable the domestic sector of the target countries to produce a higher quantity of essential drugs, which are needed to treat the most common diseases in the target countries and, at a later stage, in the neighbouring countries as well. The approach has focused on the 1) role of governments in creating a legally and economically enabling environment through developing or amending industrial policies for the pharmaceutical sector; 2) strengthening regulatory capacities at national and regional level; 3) funding the establishment or revitalization of regional and national associations of pharmaceutical manufacturers; 4) providing technical assistance in assessing and implementing GMP at pharmaceutical companies; 5) supporting the development of a new training curriculum; and 6) providing training opportunities for public servants, pharmacists and pharmacy students.

In Ghana prior to the development of the Ghana Pharmaceutical Sector Development Strategy – November 2018 the pharmaceutical industry was characterized by:

- Poor quality of production
- Obsolete technology
- Gaps in regulation
- Limited markets
- Poor coordination since it implied a split of responsibilities between the Ministry of Health and the Ministry of Trade and Industry

Despite the efforts of the last two decades the burden of infectious diseases is still disproportionately high in some African countries, particularly in sub-Saharan Africa, with significant impacts on health and socio-economic development. Furthermore, the estimated ten percent of substandard or falsified medical products presents not only a waste of money for individuals and health systems that purchased these products, but counterfeit medical products fail to treat or prevent diseases and can even cause serious illness or death and thus undermine the trust in the health care systems.

With the availability of locally or regionally produced, quality-assured, effective medicines with affordable prices the proportion of substandard or falsified medicines is expected to decrease in Africa. Thus, the Project can contribute to improved health care services and, consequently better health status and quality of life of the population of the target countries.

"The original objectives of the Project are still valid and even revised ones."

Source: Project stakeholder interviewed by the evaluation team.

Improving the productivity of the pharmaceutical sector and the quality of their products can increase demand for the manufactured products, create jobs for highly qualified and skilled staff and lead to increased revenues of the target countries. This may contribute to socio-economic changes.

Pharmaceutical products, mainly vaccines and medicines preventing, alleviating and/or curing infectious diseases, are often purchased by national or international purchasers. National purchasers, such as governments or NGOs, may prefer domestic products as an opportunity to support the local industry or generate procurement savings. When those purchasers decide on buying from local manufacturers safety, efficacy and financial considerations including affordability will be the main decision-making factors. However, governments may not want to support the domestic pharmaceutical industry in the long run if the prices for local products are higher than those from the international companies.

The target countries of the Project were selected based on their political will and commitment to creating an enabling environment for pharmaceutical development, enhancing regulatory capacities and supporting the pharmaceutical industry in developing capacities. While at the design phase of the Project political will was a key issue in the selection process, over the implementation period of Phases 4-6 changes in national governments and/or in high governmental positions may have led to changes in their political will and the level of political support to the Project and thus in certain target countries to a decreased governmental interest and support to the Project.

The Terminal Evaluation found that the Project has performed quite well on relevance. Documented evidence showed and all interviewees agreed that the Project was relevant on each of the sub-criteria assessed.

Pharmaceutical production is a complex process which requires investment and knowledge, highly educated and skilled staff, facilities and technology. At national level the legislative framework needs to be favourable not only for the local production but for importing raw materials and intermediates and procuring medical products from domestic manufacturers.

Economically viable manufacturing of pharmaceutical products may increase exports to neighbouring countries or at regional level if they are of international standards and have competitive prices.

Of particular note is that the Project and its activities were timely and in alignment with the target countries' national development priorities as well as the priorities of UNIDO, WHO and other UN agencies which have mandates in the Project area. The Project was in line with UNIDO's mandate by promoting industrial development for poverty reduction, inclusive globalization and environmental sustainability.

In focusing on the pharmaceutical manufacturers in developing countries, this project is perfectly aligned with UNIDO's first thematic priority by interacting on both health and economic growth.

Through the second thematic priority, UNIDO strengthens the capacity of developing countries to participate in the global trade, considered to be critical for their future economic growth. This project offered customer-focused advice and integrated technical assistance in the areas of pharmaceutical policies, industrial modernization and upgrading GMP compliance.

Strengthening the local manufacturing of generic medicines in developing countries is aligned with the main Donor's, the German Government's, approach to Intellectual Property Rights and Health. Germany fosters pharmaceutical production through its bilateral cooperation and supports the exploitation of the TRIPS flexibilities by developing countries.

The Phases of this UNIDO Project were largely funded by the BMZ, Germany, with a significant contribution from the Deutsche Gesellschaft für Internationale Zusammenarbeit GIZ (several direct contracts with UNIDO / Polifonds). WAHO has also contributed to the implementation of the Project with USD 1.9m.

GIZ is a global service provider in the field of international cooperation for sustainable development, and the GIZ Project '*Access to high quality and affordable medicines in Africa and South-East Asia*' addressed multiple factors that impact the availability and affordability of medicines and other health products such as vaccines.

"The Project reflected donor policies and priorities to a great extent by supporting industrialization development."

Source: Project stakeholder interviewed by the evaluation team.

The Project is relevant for three of the Sustainable Development Goals, namely, SDG3-Good Health and Well-being; SDG9- Industry, Innovation and Infrastructure; and SDG17-Partnership for the Goals[4].

SDG3

Ensure healthy lives and promote well-being for all at all ages;

SDG9

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; and

SDG17

Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Source: United Nations' website

In summary, the overall assessment on the relevance of the Project was highly

[4] https://www.un.org/development/desa/

positive and it was consistent with the views of interviewees in the mission countries. The interviewees emphasized the importance of the Project and its strong alignment with the needs at regional and national level. Furthermore, the Project generated / initiated regional level activities in particular in East and West Africa. In the latter region, further agreed collaboration between UNIDO and the West African Health Organization will lead to the continuation of several activities of the Project.

Effectiveness

For analysing the effectiveness, the achievement of the objectives was reviewed and how the target groups perceived them. The Project has several key activities including the following:

- Assisting the regional organizations and the governments of the target countries in developing pharmaceutical industry development policies, business plan, action plans; and roadmaps towards internationally accepted GMP;

- Assessing the level of compliance with GMP standards at pharmaceutical manufacturers and assisting the respective pharmaceutical companies, by offering consultation opportunities, in improving their facilities and quality management systems to achieve higher levels of GMP compliance;

- Providing medicines coding, GMP and CAPA (Corrective Action/ Preventive Action) trainings; hands-on training opportunities for civil servants of the regulatory agencies in GMP assessment; and scholarships in Industrial Pharmacy Advanced Training (IPAT) Programme for pharmaceutical students and pharmacists working at or aiming at working at the pharmaceutical industry;

- Supporting the development of a new curriculum for a master's training in Biotechnology, Innovation and Regulatory Science (BIRS) and offering scholarships to attend the training;

- Conceptualizing and developing a market intelligence software and database, iPMIS, to collect, analyse and potentially share pharmaceutical data with those who provided their data;

- Drafting a study on vaccine manufacturing capacity and procurement mechanisms in Africa and related future trends.

- Publication of a guidance document on promoting pharmaceutical production in Africa that is publicly available and targeted at government policy makers, private sector, development partners and development finance institutions.

Annex 6 comprises detailed information on the achieved outputs and outcomes.

Data suggest that attention was given to creating effective strategic partnerships with regional international organizations, national governments and associations of pharmaceutical manufacturers for the planning, coordination and implementation of the project activities. UNIDO and its partner UN agencies worked together with ministries, regulatory authorities, pharmaceutical companies and universities/training organizations. Interviews confirmed that partnerships developed through the project were an important factor for success and where partnerships were stronger and worked

better the regional and local partners display stronger ownership of the Project and hence are more active in seeking funds for the continuation of the Project.

The evaluation has found that the Project contributed to the creation of regional and national sector development strategies, policies, action plans and road maps; or initiated the development of those documents. Examples include the Pharmaceutical Manufacturing Plan for Africa – Business Plan, the East African Community Regional Pharmaceutical Manufacturing Plan of Action (2012-2016), the Kenya GMP Roadmap, the Sector Development Strategy for Pharmaceutical Manufacturing in Zimbabwe 2017-2022 and the 2nd EAC Regional Pharmaceutical Manufacturing Plan of Action 2017–2027. The sector specific strategy of Zimbabwe has not been formally launched yet but according to sources the sector is implementing activities as per the strategies.

In Ghana, the government and the industry did not have one document that identifies the challenges of the pharmaceutical production sector and articulates solutions to address these challenges in one framework. While activities to improve local production were ongoing, they were disjointed. This project brought together all relevant stakeholders and provided one reference framework for improvement.

Source: Project stakeholder interviewed by the evaluation team.

Among others, the Project aimed at supporting the target countries in developing country-specific, risk-based, phased and achievable roadmaps towards internationally acceptable GMP standards, such as WHO GMP. The roadmap development process comprised of three phases 1) collecting baseline data on the existing manufacturing practices, 2) evaluating the gathered information and identifying the main common technical challenges of the pharmaceutical companies, and based on them 3) assisting the respective countries in designing their GMP roadmap.

Assessing the application level of WHO Good Manufacturing Practice (GMP)[5], assisting the pharmaceutical manufacturers towards improving WHO GMP compliance and hence support WHO pre-qualification aspirations and providing training in GMP was also part of the Project.

Good manufacturing practice (GMP) describes the minimum standard that a medicines manufacturer must meet in their production processes. GMP requires that medicines:

- are of consistent high quality;
- are appropriate for their intended use;
- meet the requirements of the marketing authorisation or clinical trial authorisation.

Source: The European Medicines Agency (EMA)

[5] https://www.ema.europa.eu/en/human-regulatory/research-development/compliance/good-manufacturing-practice

There was a lot of willingness from the manufacturers, who desire to participate in the donor market for drugs but are unable to because they do not meet the GMP standards required. (Products cannot be prequalified.)

Source: Project stakeholder interviewed by the evaluation team.

One of the achievements of the Project was that WHO agreed with the need for a milestone-driven approach to upgrading the pharmaceutical companies' facilities and quality management system and collaborated on combining this approach with a risk assessment for generic products of the Essential Medicines List. In principle, such an approach would allow for manufacturing risks associated with specific products and the resultant risk to public health to be mitigated through providing guidance as to where the degree of non-compliance with GMP poses a particular risk to product safety in particular.

The evaluation found that the Project succeeded in initiating changes, in particular improving GMP compliance, which, within 5-8 years, are likely to result in full compliance with WHO GMP at several pharmaceutical companies based in Africa.

WHO Pre-qualification aims to ensure that diagnostics, medicines, vaccines and immunization-related equipment and devices for high burden diseases meet global standards of quality, safety and efficacy, in order to optimize use of health resources and improve health outcomes.

This information, in conjunction with other procurement criteria, is used by UN and other procurement agencies to make purchasing decisions regarding diagnostics, medicines and/or vaccines.

Source: WHO's website

The GMP gap assessments were very positively received by the vast majority of companies.

Source: Project stakeholder interviewed by the evaluation team.

Trainings on GMP, guidelines of other regulatory bodies, such as the International Conference on Harmonization (ICH), quality assurance (Lean Six Sigma) and Intellectual Property Rights were delivered to regulators, pharmacists and industry representatives.

In Zimbabwe, the pharmaceutical production industry currently enjoys an improved relationship with the regulator, as a result of this project. Prior to the Project, the regulator's actions were mainly to force the industry to comply with the quality assurance standards with punitive repercussions for non-compliance. Through this project they have obtained structured performance improvement measures. The industry

and the regulator now engage in a more collaborative manner, and the industry receives guidance from the regulator.

Source: Project stakeholder interviewed by the evaluation team.

The pharmaceutical industry in Africa faced/is facing non-availability of sufficient number of pharmacists trained to work at the industry and have hands-on experience in industry pharmacy. To address this challenge UNIDO, the Federation of East African Pharmaceutical Manufacturers (FEAPM) and schools of pharmacy developed and implemented a regional training programme to train industry pharmacists. The curriculum to develop practical skills of pharmacists was developed by a joint effort of the academia and the industry.

The availability of UNIDO sponsored scholarships made it possible to pharmacists from the public and private sector to participate in a hands-on laboratory training at the Industrial Pharmacy Teaching Unit at Saint Luke Foundation/School of Pharmacy at Kilimanjaro University. Professors from Purdue University, USA, taught subjects at those training programmes.

"The most important improvement from my point of view is a more hands-on experience and to have a better integration of the principles and knowledge acquired during the lessons and other theory sessions."

Source: Project stakeholder interviewed by the evaluation team.

A software, called iPMIS, was developed for collecting marketing data from the pharmaceutical companies based in the target countries. The evaluators learned that in all of Africa, there is a far reaching lack of accessible data on exports, imports and re-exports of medicines, including donations, on the one side and the details of nationally produced medicines on the other side. However, decision-making at policy and corporate level is often based on guesswork and very sketchy information. LPP approaches are hardly ever based on quantitative evidence. iPMIS was developed in response to the described problem. This activity was the least successful and the room for improvement is considerable. At the time of the evaluation mission in Tanzania iPMIS had only incomplete baseline data. Not all East African target countries and their pharmaceutical companies are willing to provide data and agree to share their anonymized data with other countries in the region. The national databases are fragmented, some of them available electronically, others in hard copies only. Interviewees and focus group participants noted that the level of achievement in fulfilling this objective fell much below expectations, and that more could have been done with allowing more time and an extra budget for extended preparation and scoping the work in the design phase, including comprehensive stakeholder consultations. Better communication throughout the implementation of this activity, more targeted interventions delivered by a UNIDO staff based at the site and dedicated staff at EAC may also have improved the buy-in of this activity.

In the last two Phases of the UNIDO project actions were taken for exploring a broader range of product categories including vaccines. Access to vaccines improved significantly in Africa over the last decades but the burden of vaccine preventable diseases remains high despite the increasing availability of life saving vaccines. Vaccines are predominantly donor or publicly funded and the uninterrupted supply of high-quality vaccines is essential in preventing several diseases. The studies drafted: 1) VMPA Vaccine Manufacturing and Procurement Study in Africa, 2) White Paper on Commercializing Vaccines: A Methodology to identify potential market opportunities and conduct outline assessment, and 3) White Paper on Establishing Manufacturing capabilities for Human Vaccines describe the current situation and explore the feasibility of establishing sustainable vaccine manufacturing in Africa.

The VMPA Study was drafted by a group of experts and focused on providing an analytical assessment of vaccine manufacturing capacities and procurement mechanisms on the continent. This study gives a good picture on the current situation of vaccine manufacturing in Africa as well as on expected trends, and thus it is a useful source of information for potential investors and African governments with an interest in strengthening or establishing vaccine manufacturing capacities in Africa.

"With hindsight, the cooperation at the technical level in the assessment of vaccine manufacturing capacities and procurement mechanisms in Africa was excellent and nothing should have been done differently."

Source: Project stakeholder interviewed by the evaluation team.

In terms of reaching the targeted beneficiaries, the Project performed well. The vast majority of the pharmaceutical companies established in the beneficiary countries sent employees to the trainings and requested the assessment of their compliance to the WHO GMP.

"By strengthening the local production of generic drugs, the project has a strong potential for job creation and increasing exports."

Source: Project stakeholder interviewed by the evaluation team.

In summary, most of the targeted objectives were met, the majority of the activities were effective and the positive benefits on the target groups are obvious. However, one important objective -to operationalize a market intelligence system, iPMIS, in East Africa- failed to reach a satisfactory level.

Project design

The importance of capacity development was a key issue in several areas, including capacity development 1) in policy and strategy development at the national ministries and regional level international agencies; 2) in GMP, industry pharmacy and quality assurance at national regulatory agencies and pharmaceutical companies; and 3) advocacy at the regional and national associations of pharmaceutical companies.

The logical framework was well-developed and detailed. It comprised the intervention logic, specified milestones and defined 19 appropriate indicators to track outcomes and results.

The Mid-term Evaluation Report[6] of the preceding Phases of the Project comprised recommendations to UNIDO and the Donor; and Lessons learnt. Several of the recommendations were considered in the next phases of the Project, including UNIDO's increased activities in facilitating meetings; providing international consultants for advocacy functions; and indicating objectively verifiable indicators in the logframe. Phases 4-6 of the Project had a focus, among others, on two of those countries which were suggested in the Mid-term Evaluation Report and were achieving convincing results.

According to interviewees, in countries where a committed, permanent UNIDO employee worked with the local partners on a day-to-day basis concerns raised by the local stakeholder were dealt with more effectively.

"Please try to understand the root cause of the problem and also consider local staff who can really understand the subject matter."

Source: Project stakeholder interviewed by the evaluation team.

The evaluation found that the view on whether the time allocated to the design phase and the involvement of the local stakeholders in order to collect inputs from them and fine-tune the Project plan together was enough or not is largely dependent on the source. Staff of the international organizations were more likely to say that the time allocated to the consultation with the national stakeholders was sufficient. This view is supported by the Project documents as well. Meetings were organized in the target countries in order to meet the main stakeholders and learn about their needs and expectations and receive inputs from them. Despite this, several local stakeholders said that they were not consulted to the extent needed to develop their desired ownership. This was particularly obvious when reference was made to iPMIS as the "UNIDO Project".

"There was no clear ownership of the Project in my country. Most respondents recognize the Project as driven by UNIDO."

Source: Project stakeholder interviewed by the evaluation team.

The short timeframe of each Phase may have contributed to this weakness of the Project.

Efficiency

The picture that emerged in this section is less positive than in relevance criterion, but still positive, with the majority of the activities performing well or satisfactorily. The

[6] https://www.unido.org/sites/default/files/2010-12/Genericdrug2010_0.PDF assessed 10 August 2019

evidence from interviews, focus group discussions, country visits and document reviews is rather consistent.

1. Table Budget of all projects included in the evaluation

Table 1. Budget of all projects included in the evaluation					
Project ID	**Runtime**	**Resources available (million)**		**Resources utilised, million (till Sep 2019)**	
	(From – To)	**EUR**	**USD**	**EUR**	**USD**
120117	11/2012 – 12/2018	4,76	0,17	4,17	0,16
130209	01/2014 – 06/2016	0,70		0,70	
140292	01/2015 – 03/2018	1,91		1,89	
160189	10/2016 – 07/2018	0,31		0,30	
160202	01/2017 – 03/2019	0,35	1,86	0,20	1,31
Total		**8,03**	**2,03**	**7,26**	**1,47**

2. Table Budget of all projects by outputs

Budget by OUTPUT						
SAP ID	Grant	Ref	Budget = Allotment		Budget = Expenditure	
			EUR	USD	EUR	USD
120117	2000001413	Phase 4, BMZ	876 942,49		876 942,49	
		Output 1: 120117-1-01-01	424 024,79		424 024,79	
		Output 2: 120117-1-01-06	149 589,15		149 589,15	
		Output 3: 120117-1-01-03	125 772,79		125 772,79	
		Output 4: 120117-1-01-04	10 223,42		10 223,42	
		Output 51: 120117-1-51-01	167 332,34		167 332,34	
120117	200001125	UE Phase 4	2 063 884,76		2 060 989,51	
		Output 1: 120117-1-01-01	986 388,90		986 388,90	
		Output 2: 120117-1-01-06	478 134,01		478 134,01	
		Output 3: 120117-1-01-03	184 675,47		184 675,47	
		Output 4: 120117-1-01-04	55 985,52		55 985,52	
		Output 51: 120117-1-51-01	358 700,86		358 700,86	
120117	2000003508	UE Phase 4-6	1 259 329,20		1 194 962,72	
		Output 1: 120117-1-01-01	694 939,93		694 939,93	
		Output 2: 120117-1-01-06	177 343,54		177 343,54	
		Output 3: 120117-1-01-03	20 827,53		20 827,53	
		Output 4: 120117-1-01-04	40 028,45		40 028,45	
		Output 51: 120117-1-51-01	326 189,75		261 823,27	
120117	2000001450	FB VietNam (120117 portion only)		150 284,62		150 284,62
		Output 1: 120117-1-01-01		150 284,62		150 284,62
130209	2000002553	Phase 5, BMZ	618 607,54		618 607,54	
		Output 1: 130209-1-01-01	296 635,74		296 635,74	
		Output 2: 130209-1-01-02	38 007,95		38 007,95	
		Output 3: 130209-1-01-03	119 255,78		119 255,78	
		Output 4: 130209-1-01-04	7 609,82		7 609,82	
		Output 51: 130209-1-51-01	157 098,25		157 098,25	
140292	2000002893	Phase 5.2, BMZ	610 891,65		610 891,65	
		Output 1: 140292-1-01-01	273 166,42		273 166,42	
		Output 2: 140292-1-01-02	10 969,76		10 969,76	
		Output 3: 140292-1-01-03	136 313,71		136 313,71	
		Output 4: 140292-1-01-04	7 386,27		7 386,27	
		Output 51: 140292-1-51-01	183 055,49		183 055,49	
140292	500298	YA 2015	105 939,23		105 939,23	
		Output 1: 140292-1-01-01	105 939,23		105 939,23	
140292	500316	YA 2016 = this grant is just a transfer of 2015 YA balance	40 652,23		40 652,23	
		Output 1: 140292-1-01-01	40 652,23		40 652,23	
140292	2000002928	Phase 5.2, GIZ (2015)	677 999,45		677 999,45	
		Output 1: 140292-1-01-01	371 902,99		371 902,99	
		Output 2: 140292-1-01-02	145 385,78		145 385,78	
		Output 3: 140292-1-01-03	160 710,68		160 710,68	
140292	2000003293	Phase 5.2, GIZ (2016)	221 839,98		221 839,98	
		Output 1: 140292-1-01-01	28 272,45		28 272,45	
		Output 2: 140292-1-01-02	193 567,53		193 567,53	
140292	2000003812	Phase 5.2, GIZ (2017)	32 465,78		32 465,78	
		Output 2: 140292-1-01-02	32 465,78		32 465,78	
160189	2000003545	Investment Phase, BMZ	303 714,35		303 714,35	
		Output 1: 160189-1-01-01	150 540,47			
		Output 2: 160189-1-01-02	144 142,92			
		Output 51: 160189-1-51-01	9 030,96			
160202	2000003535	Phase 6, BMZ	309 734,51		306 969,87	
		Output 1: 160202-1-01-01	161 566,63		159 343,35	
		Output 2: 160202-1-01-02	8 572,78		8 558,47	
		Output 3: 160202-1-01-03	64 259,25		64 259,25	
		Output 4: 160202-1-01-04	75 335,85		74 808,80	
160202	2000003560	WAHO		1 644 400,88		1 607 132,73
		Output 1: 160202-1-01-01		1 491 432,41		1 467 438,40
		Output 51: 160202-1-51-01		152 968,47		139 694,33
160202	4000715	XP - Phase 6 (for WAHO activities)	40 000,00		27 407,62	
		Output 1: 160202-1-01-01	37 000,00		27 407,62	
		Output 4: 160202-1-01-04	500,00		0,00	
		Output 51: 160202-1-51-01	2 500,00		0,00	

A revised funding plan was prepared for drafting of the Vaccine Manufacturing and Procurement in Africa Study. This ensured that all activities started according to the timeframe which avoided a delay of the Project. The cost split of the Project remained unchanged.

A risk-based, phased approach was developed and used for assessing WHO GMP compliance of pharmaceutical manufacturers. The assessment was highly effective covering 108 companies. The majority of these assessments were conducted by UNIDO and its experts. However, due to a limited capacity on the side of UNIDO and the time constraints an NGO was also involved in this process. Sources informed the evaluators that the work conducted by the NGO was much faster and cheaper. The limited capacity of UNIDO's consultants extended the time to complete the Project activities and the beneficiaries had to wait until the consultants completed their work in other countries.

More could have been achieved if the target countries had had dedicated consultants (not shared with other countries)

Source: Project stakeholder interviewed by the evaluation team.

As an unplanned activity of the Project UNIDO and WHO collaborated to explore combining the GMP roadmap with a product risk assessment tool developed by WHO.

The Integrated Pharmaceutical Market Information System (iPMIS) was developed to provide regional and country level pharmaceutical information broken down by type or category and value of medicines consumed in the respective domestic market. A user interface to submit data and a query reporting tool was developed and made available; and training on how to use the software was delivered. During the implementation of the Project apprehension arose among domestic manufacturers about regular and systematic sharing of their production and sales data, although that was intended from the outset because EAC Secretariat expected UNIDO to produce a detailed report with data / regional snapshot. (It must be noted that data sharing was not done previously.) In addition, regulatory authorities were reluctant to work with the software, create and maintain a national database. Data collection is not originally a core function of the national regulatory agencies even though they are the 'natural' custodian of relevant detailed data and hence obvious host of the market information function. In dealing with this problem UNIDO implemented mitigation measures including confidence-building, awareness-raising on built-in data protection measures of the software; and trainings on how to use iPMIS. As a result, an agreement, which was not a novel one because it had also been part of the original plan, was reached by the interested parties that data would be provided to the national regulatory agencies and used only in aggregate without conveying production figures of individual companies. Thus, the national agencies protect data confidentiality. These measures proved to be only partially effective because due to technical and mostly stakeholders' challenges

iPMIS collects and analyses data of each product on
- domestic production
- import
- export
- re-export
- donation.

iPMIS allows
- direct upload of production by local manufacturers
- market data queries through a Query/Search tool

iPMIS is still not implemented in Kenya. In Zanzibar iPMIS was not implemented due to non-completion of their MIS system. Information on reporting activities of the other countries in the region, Uganda and Tanzania, is somewhat confusing. While they may report their data to the national regulatory agencies the iPMIS database at the East African Community is said to be not comprising all but only some baseline data.

Although the National Medicine Regulatory Agencies (NMRAs) (or the majority of them) have been convinced of the importance of enforcing the collection of data from local manufacturers on a regular basis, at the time of the Project closure the policy and legal issues governing the access to the pharmaceutical market information by potential users were not resolved. Thus, the principal objective of iPMIS has not been fulfilled.

There were considerable delays in several activities of the Project and cost-free extensions were requested for each Phase for implementing all planned activities and achieve the objectives.

In trying to better understand the reasons for the weaknesses in efficiency, factors emerging as possible explanations were common to several activities:

- Changes in the government of the target countries or in key governmental positions resulted in changed priorities of countries which slowed down the implementation of the Project or made difficult to obtain the requested level of support or contributions;

• The lack of committed counterparts at the partner organizations or governments led to sub-optimal involvement of stakeholders and perhaps less ownership on the part of regional and national stakeholders; According to respondents, the project did not have one recognized owner, and each stakeholder took ownership of the tasks they were responsible for. There was no formal agreement between UNIDO and the Ministry of Trade and Innovation (MOTI) which was eventually responsible for obtaining approval and launching the strategy. All agreements were verbal, and the concerned officials retired.

Source: Project stakeholder interviewed by the evaluation team.

- In some cases, the inclusion of external experts and their contribution were critical and the delay in identifying and contracting a highly experienced, suitable expert was considerable;

- A limited number of international consultants worked on the Project and offered services to the target countries. This increased the time to complete the Project activities and caused some delays;

- On several occasions the decision-making was slow on the part of key partners, including UNIDO's slow decision on selecting a Senior Technical Advisor and the PMPA BP Coordinator and replacing the Industrial Development Expert who was on maternity leave;

- In one country, the lack of proper governing structures, including a national steering committee, for providing guidance and supervising the management and implementation of the Project contributed to delays and partial achievements;

- The partial reorganization of the African Union Community (AUC) and the lack of active counterparts at AUC caused challenges in the collaboration and resulted in some delays. In order to address this issue a coordination mechanism to manage the Project was agreed upon and introduced.

- The extent to which different UN partners worked together towards common objectives varied. There is evidence that staff of UN partner agencies struggled to balance their own agency's requirements with those required by this Project and this caused delays.

Lessons learnt from the iPMIS are summarized by UNIDO and include underestimating the magnitude of the challenge in collecting marketing data from the pharmaceutical companies, level of difficulties and the political obstacles; the faulty assumption of the demand for accurate pharmaceutical market information; lack of proper governance structure for the Project and the lack of infrastructure and personnel at the EAC Secretariat and national agencies; and the slowness of EAC procedures. The evaluation found that misinterpretation of the objectives and mistrust also played its part in the delay and the partial achievement of iPMIS' objectives.

Project management and implementation

The key Project documents comprised information on the context, including background information, problems to be addressed, information on the target beneficiaries, objectives and the approach. The planned activities were described in sufficient detail and responsibilities were assigned to UNIDO staff and the partnering agencies.

There is documented evidence of monitoring and self-evaluation. Project plans for the new Phases of the Project comprise short chapters on monitoring, reporting and evaluation. Other chapters are dealing with Lessons learnt in the past, risks, and Result Based Monitoring. Progress Reports have tables with information on "Activity or service delivered" and "Outputs observed". They also have narrative parts which describe the major achievements, problems encountered and provide an overall assessment. Occasionally, interim reports comprise chapters on self-evaluation.

The project provided direction on the way forward and empowered local industries with knowledge about the industry and their individual challenges that need to be addressed.

Source: Project stakeholder interviewed by the evaluation team.

UNIDO provided scholarships to students for attending IPAT (Industrial Pharmacy Advanced Training) and BIRS (Biotechnology, Innovation and Regulatory Science) courses at the Industrial Pharmacy Teaching Unit at Saint Luke Foundation/School of Pharmacy at Kilimanjaro University. Participants from the governments and public services were fully sponsored (100%), while participants coming from pharmaceutical industry received reduced financial support, they were sponsored to 50%. This was a

limiting factor for private students who wanted to be enrolled into one of the courses but could not afford to do so without a full sponsorship.

Continued high demand for IPAT training course and high ratings of outcome by participants indicates relevance and usefulness of the training offered.

Source: Project stakeholder interviewed by the evaluation team.

In general, the coordination of the Project with GIZ and UN agencies was smooth, and different channels were used for regular communication. While the cooperation at technical level and the communication between the technical experts of the UN agencies was mostly satisfactory, it highly depended on the persons involved and varied. One UN employee mentioned that the interaction between senior level officers and directors of UN agencies was very limited.

Directors or senior level officers of UN agencies should have met and talked about the project more often. In fact, they hardly met and talked to each other.

Source: Project stakeholder interviewed by the evaluation team.

Sustainability

Overall, the findings from the evaluation show a positive picture indicating that most of the results and benefits would continue after completion of the Project.

The member states of EAC are committed to develop their pharmaceutical industry as part of the regional social and political integration agenda and recognized the strategic importance of the local production of medicines. The first and second EAC Regional Pharmaceutical Manufacturing Plan of Action serve as a roadmap towards the evolvement of a competitive regional pharmaceutical manufacturing industry.

A Joint Declaration signed by UNIDO and WAHO in 2018 stated the intention of the two organizations to work together to develop the pharmaceutical industry in West Africa. In 2019 the two organizations signed a Relationship Agreement to support the development of the pharmaceutical industry in the ECOWAS region and to implement the regional pharmaceutical upgrading framework that has been developed. This comprehensive programme aims at engaging WAHO Member States and other partners and at mobilizing resources.

The country visits provided more insights into the success factors. In target countries where the government had already been strongly committed to creating an enabling environment for the pharmaceutical industry and it participated actively in the implementation of the Project the government ownership is stronger and the sustainability of the Project's results and benefits appears to be more likely. Several

mission countries reported the commitment of their governments and pharmaceutical industry to increase the local production of essential medicines. The objectives varied from doubling the current (relatively low) level of production to producing almost all medicines needed by the country. According to sources, this driving force is a strong one and will ensure the sustainability of the results.

In two target countries fiscal policies are used recently to support the development of the pharmaceutical industry. In Kenya, the government exempted HVAC (heating, ventilation, and air conditioning) systems from payment of duty to make them affordable to the local pharmaceutical manufacturers and therefore pharmaceutical companies meet WHO requirements. (It must be noted however, that in Kenya, after the general elections in 2013 the new government introduced VAT even retroactively on pharmaceutical raw materials which presented an unexpected threat to the industry. Sensitizing the Ministry of Industrialization on this issue required efforts from all implementing partners of the Project.)

Zimbabwe is currently facing critical medicine shortages due to the lack of foreign exchange. As a result, the government is looking for the local pharmaceutical industry to provide the medicines needed. There is therefore a significant amount of political will to increase the local productions of medicines and the Ministry of Finance reduced tariffs on raw materials for pharmaceutical production. According to interviewees, while the need for improvement in the local pharmaceutical production sector in Zimbabwe was recognized and greatly needed, it is unlikely that these activities would have been conducted without the UNIDO Project.

In the future sustainability can be further strengthened by appropriate changes in government and regulatory structures and the rule of law.

The national stakeholders who were interviewed had concerns whether there will be national resources to provide trainings for the new employees of the regulatory agencies and refreshing trainings for the others as well as for the employees of the pharmaceutical companies. Local manufacturers lack capital which affects the training opportunities of their employees.

Due to resource constraints, most manufacturers opted to improve on what is considered 'low hanging fruit' e.g. developing Standard Operating Procedures (SOPs) and documentation.

Source: Project stakeholder interviewed by the evaluation team.

The Kilimanjaro University in Arusha, Tanzania has a facility to provide practical trainings for those pharmacy students who would like to pursue a career in the pharmaceutical industry or pharmacists who have already been working in the industry. During the implementation of the Project Kilimanjaro University worked with University of Purdue, however, this collaboration ended. At the time of the evaluation the principals of the School of Pharmacy were actively seeking new partners to continue the availability of this two-weeks hands-on training.

The only area where sustainability of the results is highly questionable is the collection of marketing data from the national pharmaceutical companies.

In countries where the results and the benefits are less likely to be sustained, the question is whether the prospects could have been more promising with different initial designs, more engagement and involvement of the stakeholders, more focus on the ownership and exit strategies and/or a longer timeframe. Each Phase of the Project was based on the results of the previous ones, and thus to a certain extent it was the continuation. The German Government provided the vast majority of the financial resources for the continuation of the Project. Key informants said that it was taken for granted that there would be financial resources from the German Government for the continuation of the Project, and each additional funding tranche allowed for more in-depth focus and diversification of the intervention scope towards the long-term agenda of improving LPP. There was therefore less effort and consideration given to developing exit strategies at the design phase.

The project did not have an explicit exit strategy; it operated with annual implementation plans.

Source: Project stakeholder interviewed by the evaluation team.

While the ownership of the Project's results and the commitment to the objectives varies from country to country and from activity to activity the majority of the results are likely to be sustained. Even in case of changes in the priorities of the target countries' the implementation of policies supporting LPP and the pharmaceutical industry will continue.

Experts indicated that current medicine procurement practices, including the procurements managed by The Global Fund (TGF) and UNICEF, are not sustainable. According to TGF[7], its costs for procuring and managing medicines and health products amounted to about USD2 billion in 2017. For the developing countries the issue is not only "donor dependence" but the likelihood of increased demand for medicines in the future. The current unmet needs for medicines will grow and, thus, African countries need to support their pharmaceutical companies in increasing production capacity and producing quality-assured medicines compliant with WHO GMP regulation in order to control diseases.

In Ghana, several of the pharmaceutical manufacturers are aiming to be GMP compliant by 2020.

Source: Project stakeholder interviewed by the evaluation team.

The most uncertain factor in carrying on the activities needed to sustain the results and benefits of the Project is the availability of financial resources. The likelihood of availability of financial resources to carry on the Project is positive in West Africa and to a lesser extent in East-Africa.

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[7] https://www.theglobalfund.org/en/sourcing-management/ assessed 13 August 2019

Addressing the CAPA recommendations requires manufacturers to have capital, which the banks are not ready to loan out. The government has approached other agencies e.g. the African Development Bank to facilitate the industry.

Source: Project stakeholder interviewed by the evaluation team.

UN organizations, UNIDO, UNAIDS and WHO, with mandates in the fields of the Project made a firm commitment to assist the African Union Commission in the accelerated implementation of the Business Plan for the Pharmaceutical Manufacturing Plan for Africa (PMPA BP).

Definitive conclusion at this point would be premature. However, the evidence above points to the potential for sustainability of the results and benefits of the Project. This is true across all activities although the potential varies among the target countries.

The benefits of the Project are too far from being posed to any risks that may jeopardize the sustainability of them

Source: Project stakeholder interviewed by the evaluation team.

Impact

The areas of impact which were reviewed are as follows: contribution to the increase of the local production of essential medicines, their increased availability and affordability now or likely to happen in the future.

The Project provided technical support to the pharmaceutical companies in two African regions to strengthen the production of essential medicines as a means to increase their availability, accessibility and affordability. The pharmaceutical industry in Africa only produces generic medicines containing small molecule APIs. The extent of drug research and development in Africa is still low and was not addressed by this Project.

Prior to the project, the pharmaceutical industry was described by key informants as:

- Haphazard pharmaceutical production with no standards guiding the production;
- Uneven regulation as regulators lacked knowledge in pharmaceutical industry enforcement;
- Industry supervision involved inspection visits for quality assurance;
- Very little collaboration between the industry and regulator due to the absence of standard guides.

While there had been earlier attempts to improve pharmaceutical production, these were limited in scope, driven by the private sector.

The Project exploited the political willingness and commitment of the target governments and contributed to the creation of enabling environment for the

pharmaceutical industry. GMP Roadmaps were developed to guide and support the transition of the target countries' pharmaceutical companies towards international GMP standards and with that to broader market opportunities. This increased the desire for WHO pre-qualification at numerous pharma companies in the region. Compliance with WHO GMP regulations increases the export potential of the companies and makes them eligible to submitting offers to international donors for delivering medicines procured by them. As it is discussed above, under the heading of Relevance, national purchasers, such as governments and health insurance funds, often prefer domestic products in order to support the local industry. In complying with WHO GMP regulations, local pharmaceutical companies compete from a much better position with the international companies. However, prices need to be competitive as well.

One Kenyan company implemented packaging as per training delivered under the Project and received WHO pre-qualification. In the same country four companies submitted applications for a WHO GMP audit.

One company reported savings on the packaging after one year of the packaging training.

Source: Project stakeholder interviewed by the evaluation team.

As a result of the GMP assessments and the CAPA training 14 companies decided to build new facilities to fulfil the GMP requirements.

The challenges the African pharmaceutical industry is facing can be, to a large extent, addressed through capacity building. Therefore, the UNIDO support is highly appreciated.

Source: Project stakeholder interviewed by the evaluation team.

Another, less direct result is that the Project supported the target countries and regional organizations in mobilizing further national and regional resources; and actively seeking donors and funds for supporting the continuation of elements of the Project.

The foundation of the first umbrella organization, the Federation of African Pharmaceutical Manufacturers Associations (FAPMA), representing the pharmaceutical manufacturers in Africa was supported by the Project. Over the years the awareness of FAPMA, as sector representative body in Africa, grew rapidly and FAPMA represented the pharma industry at advisory groups meeting and high-level events.

The training programmes have had positive impacts on the industry as a whole and the individuals participating in them. With its partners FAPMA plans to develop and implement a roadmap to provide structured trainings not only for industrial pharmacists but to pharmaceutical industrial engineers and analytical chemists.

If the regulator wants to assess heating, ventilation and air-conditioning (HVAC) systems, they need to bring in a specialist from India.

Source: Project stakeholder interviewed by the evaluation team.

The results could have been better if the Phases of the Project had been planned with considering the possibility of the continuation of the Project as a realistic option. While there was always an expectation of continuation of the project, this was not reflected in the plans for each phase, which focused only on outputs achievable within the time period of each phase. Another opportunity would have been to plan for a longer timeframe, both for the design and the implementation.

All sources agreed that progress has been made in policy development and capacity building as well as that the prospects for change were good and would be long-lasting.

Cross-cutting themes

Gender

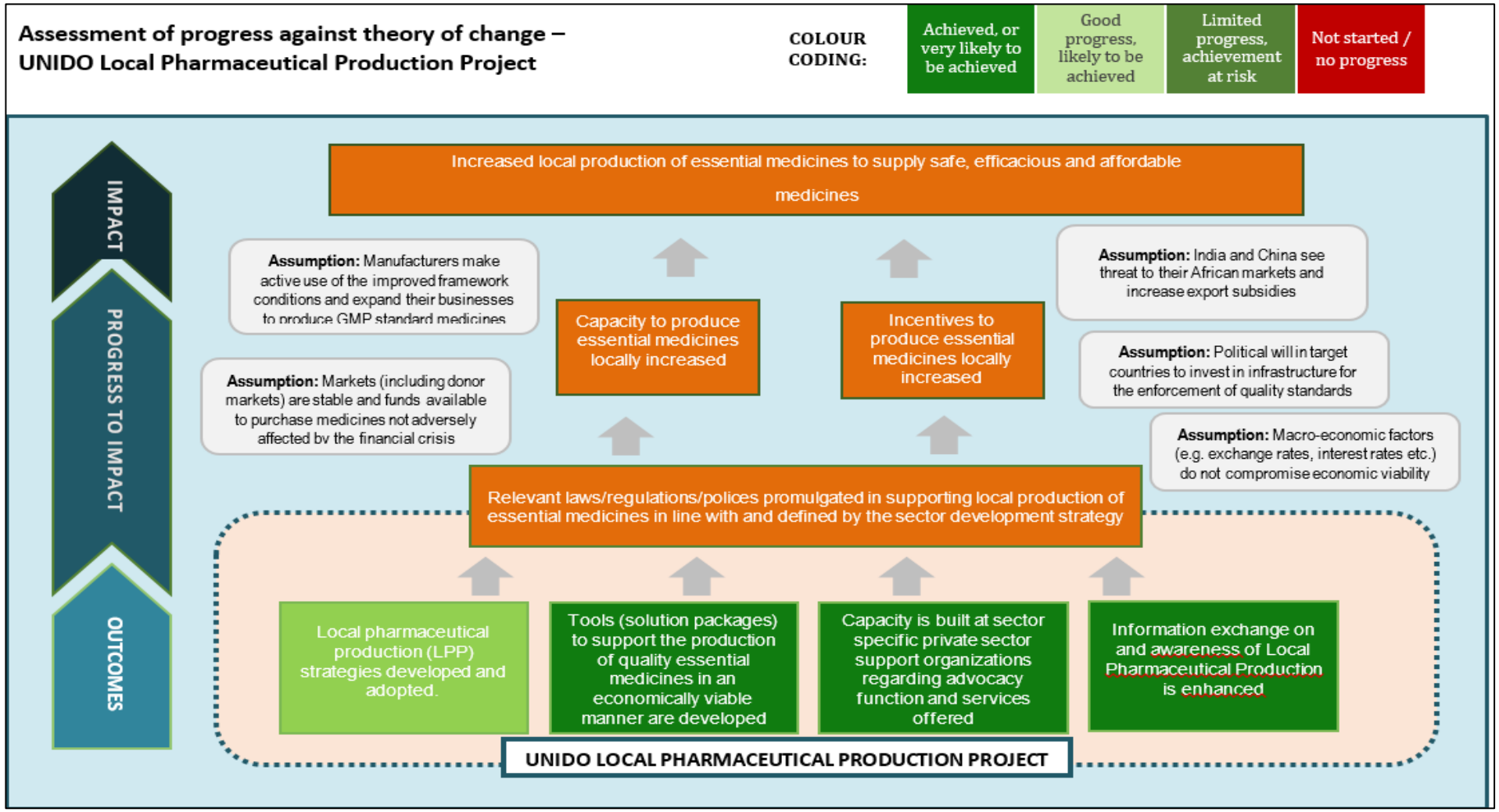
The incorporation of gender issues in the design and implementation of the Project shows a mixed picture. A Gender Review was undertaken in the last quarter of 2012 and identified gender specific aspects and activities for inclusion in the subsequent Phases of the Project. Gender-sensitive data were collected and analysed during the implementation of the Project showing that a relatively good gender balance was achieved among those who participated in the trainings. Furthermore, as the implementation of the Project progressed, the number of female participants in the training courses increased. However, all sources agreed that there was a male dominance among the implementers, including UNIDO staff, experts and trainers.

3. Table Training participants

Participants Statistics Data/Graduation Trend						
From March 2008 to March 2018						
SN	Countries	Pharma Industy	National Drug Regulatory Agency	Academia	Gender	
					Female	Male
1	Kenya	19	4	3	7	19
2	Uganda	2	10	0	5	7
3	Tanzania	5	14	5	7	17
4	Burundi	0	2	0	2	0
5	Rwanda	0	1	0	0	1
6	South Sudan	0	2	0	1	1
7	DRC	3	0	0	1	2
8	Lesotho	0	1	1	1	1
9	Zimbabwe	4	1	0	2	3
10	Nigeria	8	8	8	12	12
11	Ghana	5	0	0	1	4
	Sub-Total	46	43	17	39	67
	Grand Total = 106					

In summary, there is room for improvement in achieving a gender balance between the male and female experts working on similar UNIDO projects and for selecting women for technical officer positions for future pharmaceutical projects of UNIDO.

3. Figure Assessment of progress against of theory of change



4. UNIDO PROJECT EVALUATION RATINGS

In addition to the main assessment against the evaluation criteria, evaluations of projects implemented by UNIDO routinely assess specific aspects of the delivery. The following section summarises the findings on the performance of partners and on factors facilitating or limiting the achievement of results, particularly with regards to M&E and RBM. The section concludes with a table (standard to all UNIDO evaluations) that summarises performance ratings for each component of the project's design, delivery and management.

4.1. Performance of partners

UNIDO

The technical expertise of the UNIDO staff implementing the Project was often referred to as being of high quality. However, there was some criticism related to the limited capacity of the experts contracted by UNIDO and their delayed availability, in particular for training related activities. The fact that UNIDO did not recruit staff to work on the project in all participating countries – which could be due to budget constraint – was identified as a shortcoming.

National Counterparts

The Project was implemented in several countries which implies the relatively high number of partners and stakeholder groups at regional and national levels. The support which the Project received from high level decision-makers varied across countries and time. Parliamentarian elections, or even government reshuffles brought new counterparts with new priorities. The advisory functions of UNIDO related to the policy, strategy and road map development was highly appreciated at regional and national levels. The same applies to the training opportunities. To address the problems with the pharmaceutical market intelligence data collection was left to the EAC and its member states. The sustainability of the Project results is likely to be strongly influenced by the funding available for trainings and financial resources for upgrading the pharmaceutical facilities.

Donors

The Phases of this Project were funded by BMZ, and to a lesser extent by GIZ and WAHO. The interviewees were aware of the donors although the Project was often referred to as the "UNIDO Project". The long-standing support of the German Government on LLP in Africa made it possible to successfully implement the six Phases of Project. The Donor's flexibility, allowing cost-free extensions, enabled UNIDO to deliver all planned activities of the Project.

Factors facilitating or limiting the achievement of results

Project delivery and day-to-day monitoring benefited from a detailed logframe, which included outputs and outcomes as well as objectively verifiable indicators. Thus, the Project's monitoring system was strong in measuring both quantity and quality as well as collecting information on institutional capacity development, hands-on trainings and changes in quality assurance/ quality management achieved at the pharmaceutical companies. In summary, the logframe was designed to support results-based management.

Performance ratings table

A unique, additional element of the evaluations of UNIDO projects is the routinely conducted performance rating of each component of the project design, delivery and management. The performance of the Project is assessed against a six-point rating scale, designed by UNIDO. The scale ranges from 'highly unsatisfactory' (score 1) to 'highly satisfactory' (score 6). Based on the findings discussed above, the following table presents ratings and summary assessments for each of the UNIDO performance component.

4. Table Summary assessment of evaluation criteria

	Evaluation criteria	Summary assessment	Rating
A	**PROGRESS TO IMPACT (OVERALL)**	The Project laid foundations for delivering long-term impacts by increasing political will towards local pharmaceutical production. Pharmaceutical companies are investing into plants and CAPA improvements, and thus the potential for improved economic performance is there.	Satisfactory (5)
B	**PROJECT DESIGN (OVERALL)**		Moderately satisfactory (4)
1	Overall design	The Project was well-designed and technically robust. However, more time should have been allowed for receiving inputs from regional and national stakeholders. Potential bottlenecks should have been identified at the design phase. The nature of short multiple phases also affected negatively the planning and overall ambition of the Project which could have been designed with a programmatic approach, with long-term commitment by the donor.	Moderately satisfactory (4)
2	Logframe	The logframe was amended at mid-term and Objectively Verifiable Indicators of the impact were added. These changes made it even more operationally focused and supportive to the project delivery.	Satisfactory (5)
C	**PROJECT PERFORMANCE (OVERALL)**		
1	Relevance	Highly relevant both at global, regional and national levels. It addressed sector, industry and institutional needs, regional and national priorities, and UNIDO's mandate.	Highly satisfactory (6)
2	Effectiveness	The expected outputs and outcomes were delivered, with the exception of one, which was only partially realised.	Satisfactory (5)
3	Efficiency	Project delivery was generally efficient, but some factors had negative effect on the efficiency, in particularly delays in delivering trainings, the lack of UNIDO/project staff in most beneficiary countries. In one country, after political changes, delayed decision-making and inefficient project management and supervision were identified.	Moderately satisfactory (4)
4	Sustainability of benefits	Certain delays have been beyond UNIDO's control, but others were related to its delayed decision-making. Despite all issues the Project faced, no severe risks to sustainability were identified.	Moderately satisfactory (4)
D	**CROSS-CUTTING PERFORMANCE (OVERALL)**		

Evaluation criteria		Summary assessment	Rating
1	Gender mainstreaming	Gender mainstreaming was relatively weak at the beginning of implementation but improved as the Project progressed. This may be attributed to the use of gender sensitive indicators for training participants and the monitoring of those data,	Moderately unsatisfactory (3)
2	M&E	Data for monitoring were collected from the outset of the Project. Interim reports comprised quantitative data and a narrative part with information on issues, obstacles and causes and management of the obstacles. In some interim reports elements of self-evaluation were seen.	Moderately satisfactory (4)
3	Results-based management	The logframe included the expected impacts, outcomes and outputs. Reports comprised monitoring data and short chapters on the main problems encountered, measures taken and in some cases on self-evaluation.	Satisfactory (5)
E	**PARTNER PERFORMANCE (OVERALL)**		
1	UNIDO	UNIDO's inputs were adequate and technically robust, but efforts towards communication and the dissemination of project related information should have been more focused and activities for increasing local ownership should have been better targeted and stronger.	Moderately satisfactory (4)
2	National Counterparts	The support provided to the Project varied across the beneficiary countries and time.	Moderately unsatisfactory (3)
3	Donor	The Donor mostly acted via GIZ, which followed closely the implementation of the Project and based on its experience gained in development projects was able to judge the progress.	Satisfactory (5)
F	**OVERALL ASSESSMENT**		Satisfactory (5)

4.2. Conclusions

In general, the Project was well conceived, showing commitment to the Sustainable Development Goals as well as to UNIDO's vision and mission and fulfilled its objectives, with the exception of iPMIS which was only partially completed.

In the view of the evaluation team, the performance of the Project on the evaluation criteria is good, especially when taking into account the challenges and obstacles, the varied political willingness and commitments, and the differences in the legal and economic environment of the countries where the Project was implemented. In several cases changes in government led to shifts in the priorities and thus caused new, unexpected challenges. Actions to resolve them required tact, sensitization, re-organization of the Project activities and other measures.

The delivery of the Project demonstrated what can be achieved with a relatively small budget in several countries. The results of the Project across countries showed not only what can be achieved, but how it can be done employing a combination of a holistic and stepwise approach.

The Project demonstrated how technical expertise and comparative advantages of the UN agencies can leverage the delivery of a development cooperation project.

Among the factors contributing to the success of the Project, the two most important ones are: UNIDO's experience and expertise gained over the years that has made the Organization a key actor of this agenda at international level; and the sound, albeit implicit theory of change. Several other factors contributed to the success and the benefits of the Project, including the technical expertise and experience of the UN Partners, focus on capacity building, hiring outside experts with expertise not available at the implementing partners and strong focus on the self-evaluation.

However, there were areas where improvements could have been made to further enhance performance. The weaknesses identified were mostly related to the implementation and difficulties in addressing changes occurring at national level. While considerable amount of effort was allocated to engage the local stakeholders, the results show that more time, efforts and attention should have been given to this issue in order to gain better ownership. Some stakeholders perceived the Project a "UNIDO Project" rather than a "UNIDO-funded Project of the country/region".

Communication was weak and it did not reach a wide range of stakeholders. Thus, it did not result in the desired awareness of the Project's results and benefits.

The extent to which gender and environmental aspects, as cross-cutting issues, were integrated in the design was lower than expected and required by UNIDO's commitment.

5. RECOMMENDATIONS

5.1. Recommendations to the national governments and regional organizations

Harmonize the registration processes and establish a regional level regulatory agency

- *It is recommended to support the on-going initiatives towards a unified approach and establishing a regional regulatory agency by using the elements which already exist. The progress made by the African Medicines Regulatory Harmonization initiative (AMRH) in the EAC could serve as a basis for this approach. (Another ambitious recent project made progress towards the creation of the African Medicines Agency (AMA). Currently each EAC country has its individual product registration system and inspection processes therefore, access to the regional market is too expensive and thus, limited for most manufacturers.*

Support the pharmaceutical industry to gain access to financial resources

- *It is recommended to strengthen the support to the local pharmaceutical industry in accessing loans from international banks and other sources. The need for essential medicines in developing countries and globally is foreseen to increase so the potential for pharmaceutical companies, producing quality-assured medicines, to enter the international market is high.*

Increase the engagement of the pharmaceutical industry and the regulators to support iPMIS

- *It is recommended to commit further efforts to overcome the mistrust related to IPMIS by demonstrating strong commitment from the governments' and international organizations' side on the confidentiality of data in iPMIS and their non-availability to external actors.*

5.2. Recommendations to the Donor and UNIDO

Increase the timeframe of future projects

- *It is recommended to increase the timeframe of future projects in this sphere from three years to five years. The three-year timeframe does not allow sufficient consultation with the stakeholders at appropriate level at design phase and feed their inputs into the development of future project plans. The longer timeframe would lead to better planning and may decrease the number of requests for cost-free extensions.*

5.3. Recommendations to UNIDO and the national governments

Map systematically the potential donors

- *It is recommended to conduct a systematic mapping of actors, donors and other stakeholders who are important players in the pharmaceutical industry development, have comparative advantages in it, can support this agenda, and/or work at the interface of the pharmaceutical industry and public health and who are*

either potential donors or can assist UNIDO or the national governments in resource mobilization

5.4. Recommendations to UNIDO

Assign more time to stakeholder consultation

- *It is recommended to allocate more time and effort for the design phase of a project for the stakeholder consultation, gathering their inputs and feed them into the development of the new project. It is also recommended to make the process iterative; and consider to use an online platform which would be open to the stakeholders to comment on the proposal(s) and add inputs.*

Deploy UNIDO staff at the main project sites

- *It is recommended to deploy at least one permanent UNIDO/project staff at the target countries who would work with the local partners on a day-to-day basis and deal with the concerns raised by the local stakeholder more effectively. One committed, full time UNIDO/project staff at each target country can contribute to shaping the design with country-specific inputs from the local stakeholders and participate in the implementation as well.*

Pay attention to potential bottlenecks at the design

- *It is recommended to pay attention to identifying potential bottlenecks of future projects, such as varied political and industry willingness, commitment to adopt strategies like the iPMIS, and the availability of experts at the design phase and identify appropriate measures to take actions if needed.*

Improve communication

- *It is recommended to develop a targeted communication strategy at the design phase of future projects in order to raise the awareness of the project from its outset. The preferred communication means and channels of each stakeholder group should be used.*

Disseminate the results of this Project

- *It is recommended to disseminate the national level results of the Project across the target countries and thus sharing good practices.*

6. LESSONS LEARNT

- *The holistic approach applied by UNIDO to address the lack of effective, quality-assured essential medicines in Africa and thus, improving the availability, accessibility, and affordability of those medicines proved to be successful.*

- *To increase the effectiveness and sustainability of regional or global projects like this, it is necessary to have a formal understanding, such as Memorandum of Understanding (MOU) signed with the respective ministry of the target country.*

- *Sustaining the results and the benefit of the Project will not be possible without financial resources for providing the specialized trainings to the new employees of the regulatory agencies and the pharmaceutical industry and refresher training for those who have already been working there.*

ANNEX 1: List of Documents Reviewed

Number	Title	Source	Page Count
1	Final Report - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (phase 4) (120117) [period 01.2013-05.2014]	Electronic copy examined	16
2	Final Report - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (phase 5) (130209) [period 01.2014-10.2015]	Electronic copy examined	10
3	Final Report - Devising practical approaches for mobilizing investment capital and transfer of technology for Africa's pharmaceutical industry (160189) [period 10.2016-03.2018]	Electronic copy examined	8
4	Devising practical approaches for mobilizing investment capital and transfer of technology for Africa's pharmaceutical industry (160189) [10.2016-9 months]	Electronic copy examined	29
5	Final Report - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support - Phase 6: Mainstreaming and Consolidation (160202) and Concept Note and Agenda for the Second Regional Workshop - ECOWAS Pharmaceutical Good Manufacturing Practices Roadmap Initiative [05 & 06.12.2017] [01.2017-12.2017]	Electronic copy examined	27
6	WHITE PAPER - Commercializing Vaccines - A methodology to identify potential market opportunities and conduct outline assessments [2018]	Electronic copy examined	17
7	Developing a Comprehensive Good Manufacturing Practices (GMP) - Roadmap Initiative for the ECOWAS Region [09.12.2016]	Electronic copy examined	14
8	WHITE PAPER - Establishing Manufacturing Capabilities for Human Vaccines [2017]	Electronic copy examined	36
9	White Paper on UNIDO's GMP Roadmap	Electronic copy examined	24
10	Design of a Stepwise Approach for the Pharmaceutical Industry in Developing Countries [2015]		

Number	Title	Source	Page Count
11	Grant Agreement - Strengthening the local production of essential medicines in developing countries (phase 2015-2016) (81194886)	Electronic copy examined	16
12	UNIDO support in fostering the local pharmaceutical industry in developing countries [Vienna, 26-28.10.2018]	Electronic copy examined	5
13	Phase Revision - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support - Phase 6: Mainstreaming and Consolidation (160202) [01.2017-18 months]	Electronic copy examined	46
14	Global Project - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support - Phase 5 extension and expansion - Final 2 (140292) [01.2015-24 months]	Electronic copy examined	51
15	Global Project - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support - Phase 5 extension and expansion - Final 1 (140292) [01.2015-24 months]	Electronic copy examined	47
16	Global Project - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support - Phase 5 (130209) [01.2014-24 months]	Electronic copy examined	45
17	Global Project - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (UE/GLO/12/... 120117; TE/GLO/12/... 120191) [11.2012-28 months]	Electronic copy examined	56
18	Technical Report - International Business and Investment Forum "Mobilizing investment, technology and partnership opportunities for Africa's pharmaceutical industry" [1-2.03.2018]	Electronic copy examined	12
19	UNIDO Expert Group Meeting - Practical Approaches to Incentives, Affordable Finances and Technology Transfer to Support Pharmaceutical Production in Africa [Vienna, 27-29.09.2017]	Electronic copy examined	16

Number	Title	Source	Page Count
20	VMPA STUDY - VACCINE MANUFACTURING AND PROCUREMENT IN AFRICA [2017]	Electronic copy examined	69
21	Global Project - Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support - Phase 6: Mainstreaming and Consolidation (160202) [01.2017-18 months]	Electronic copy examined	48
22	Profiles of African Companies International Business and Investment Forum "Mobilizing investment, technology and partnership opportunities for Africa's pharmaceutical industry" () [UN Campus, Bonn, Germany 1-2.03.2018]	Electronic copy examined	153
23	FINAL REPORT ID 130209 Strengthening the local production of essential medicines in developing countries through advisory and capacity building support (phase 5) UNIDO 160202_2000003535_Interim Progress Report_2017	Electronic copy examined	13
24	Strengthening the local production of essential generic drugs in least developed/developing countries UNIDO project: TE/GLO/05/015 and TE/GLO/08/030 Funded by the Government of Germany Evaluation Report 2010 10 15.pdf	Electronic copy examined	59
25	Interim report 2000002893 Interim Dec 2016	Electronic copy examined	2
26	Interim report 120117_Interim Progress report_9Dec2014_fin	Electronic copy examined	12
27	GIZ Annexes (1-34)	Electronic copies examined	507
28	Update on the access components of the UNAIDS 2016-2021 strategy: removing access barriers to health technologies for HIV and its co-infections and co-morbidities in low- and middle-income countries (UNAIDS/PCB (43)/18.27)	Electronic copies examined	34
29	Press Statement - Interagency statement on promoting local production of medicines and other health technologies	Website article examined	1
30	Data on ARV market (?)	Electronic copies examined	
31	UNAIDS brief for Civil society - Intellectual property and access to health technologies - Questions and answers [UNAIDS 2016]	Electronic copies examined	16
32	ECOWAS ERPP - WAHO / TECHNICAL	Electronic copies	57

Number	Title	Source	Page Count
	DOCUMENT - West African Health Organization [April 2014]	examined	
33	ECOWAS roadmap on GMP with support of UNIDO - ECOWAS pharmaceutical good manufacturing practices roadmap initiative kick-off workshop	Website article examined	1
34	WAHO/XIV AHM/2013/Doc tec 02 - ECOWAS charter on public private partnership for local pharmaceutical production of ARVS and other essential medicines	Electronic copies examined	7
35	United Nations Conference on Trade and Development (UNCTAD)Using Intellectual Property Rights to Stimulate Pharmaceutical Production in Developing Countries: A Reference Guide	Electronic copies examined	204
36	United Nations Conference on Trade and Development (UNCTAD) - Tool Box for Policy Coherence in Access to Medicines and Local Pharmaceutical Production	Electronic copies examined	67
37	National Training of Judges on Intellectual Property Rights and Public Health [South Africa 15 – 17 July 2013, Pretoria, South Africa]	Electronic copies examined	9
38	East African Community - Concluding Regional Workshop on Pharmaceutical Market Information Project (EAC/TF/5/2018) [27th March 2018]	Electronic copies examined	12
39	EAC / UNIDO / GIZ Intervention to Enhance Pharmaceutical Market Intelligence in EAC Partner States (Summary of findings from UNIDO Country Visits) [Aug. 12 – Sept 2, 2015]	Electronic copies examined	10
40	EAC/GIZ/UNIDO Intervention to enhance pharmaceutical market intelligence in EAC Partner States: Status Update	Electronic copies examined	1
41	UNIDO/GIZ Intervention to Enhance Pharmaceutical Market Intelligence in EAC Partner States - Progress Meeting [6-7 February 2017 Arusha, United Republic of Tanzania]	Electronic copies examined	2
42	EAC / GIZ / UNIDO Intervention to Enhance Pharmaceutical Market Intelligence in EAC Partner States - Status Report [26 October 2016]	Electronic copies examined	5
43	Implementing a Pharmaceutical Market Info Solution in EAC Countries (Shahid Hasan) [Version 1]	Electronic copies examined	26
44	Implementing a Pharmaceutical Market Info Solution in EAC Countries (Shahid Hasan) [Version 2]	Electronic copies examined	29
45	Responses to Corinna Heineke's questions of 2 June 2017	Electronic copies examined	2

Number	Title	Source	Page Count
46	EAC / GIZ / UNIDO Pharmaceutical Market Information Project Report on Mission to Participating Member States Dec. 4th – 15th, 2017 [8th January 2018 Shahid Hasan]	Electronic copies examined	6
47	Status Update on EAC / GIZ / UNIDO Project Integrated Pharmaceutical Market Information System (iPMIS) [31st May,2017]	Electronic copies examined	4
48	Progress Report - Strengthening the local production of essential medicines and vaccines in developing countries (phase 2) - Project: 140292 (11/2017)	Electronic copies examined	10
49	Experts Consultative Meeting to Consider the Draft Project Proposal for the EAC/UNIDO/GIZ Programme to Enhance Access to Pharmaceutical Market Information (EAC/TF/10/2015) [9-10 July 2015, Arusha, United Republic of Tanzania]	Electronic copies examined	19
50	EAC/GIZ/UNIDO Intervention to Enhance Pharmaceutical Market Intelligence in EAC Partner States - Stakeholders' Meeting [Dar es Salaam, Tanzania 12th August 2015]	Electronic copies examined	7
51	Implementing a Pharmaceutical Market Info Solution in EAC Countries (Shahid Hasan)	Microsoft PowerPoint Presentation	12
52	Mission in Feb 2017 Arusha	Electronic copies examined	1
53	Mission in March 2018	Electronic copies examined	1
54	Ghana Shared Growth and Development Agenda (GSGDA) II: Costing Framework 2014-2017	Electronic copy examined	77
55	DRAFT STRATEGY. Ghana Pharmaceutical Sector Development Strategy 2018	Electronic copy examined	78
56	Pharmaceutical Manufacturing Plan for Africa: Business Plan 2012	Electronic copy examined	119
57	East African Community Regional Pharmaceutical Manufacturing Plan of Action (2012 - 2016)	Electronic copy examined	50
58	Kenya Vision 2030: Second Medium Term Plan, 2013 – 2017	Electronic copy examined	194
59	Sessional Paper No. 9 Of 2012 on the National Industrialization Policy Framework For Kenya 2012 - 2030	Electronic copy examined	58
60	Zimbabwe Agenda for Sustainable Socio-Economic Transformation (Zim Asset) October 2013-December 2018	Electronic copy examined	129
61	Zimbabwe Industrial Development Policy (2012–2016)	Electronic copy examined	52
62	Sector Development Strategy for	Electronic copy	58

Number	Title	Source	Page Count
	Pharmaceutical Manufacturing in Zimbabwe 2017-2022	examined	
63	Pharmaceutical Industry in Sub-Saharan Africa - A Guide for Promoting Pharmaceutical Production in Africa	Electronic copy examined	84
	Total		**2780**

ANNEX 2: DETAILED METHODOLOGY

Evaluation methodology

The evaluation has been executed in a participatory environment, in accordance with the Terms of Reference, involving the UNIDO Independent Evaluation Division, the contracted evaluators and key stakeholders, while ensuring the independence of the evaluation from the executing programme unit.

The evaluators used a combination of methods in order to answer the evaluation questions adequately, including desk review; use of existing data and information from various sources; collection of qualitative and quantitative data through interviews and observation.

Within the evaluation criteria identified above and based on the evaluation questions provided in the ToR the evaluation questions and sub-questions are proposed to address the expected outcomes and to gain in-depth understanding of the project. The comprehensive Evaluation Matrix provides a detailed characterization of the evaluation questions and sub-questions and facilitated the development of the evaluation tools and ultimately, allowed more meaningful data analysis.

The evaluation questions have been targeted to the stakeholder groups of the project which fall into the following groups:

- Governments of the target countries, and other relevant decision-making bodies;
- Donor;
- UNIDO;
- International/ intergovernmental organizations at global and regional levels which participated in the implementation of the project;
- Regional and national regulatory agencies;
- Pharmaceutical companies operating at national and/or regional levels;
- Universities and trainers.

Evaluation Design

The evaluation design comprised two main components: (1) the Theory of Change underlying the programme and the Logical Framework comprising the objectives, activities, outputs, outcomes, indicators and the expected impacts; and (2) the detailed description of the evaluation criteria, evaluation questions, data sources and data collection instruments, as presented in the detailed Evaluation Matrix and illustrated below.

1. Table Evaluation matrix

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	

Data sources and methods

Use of Multiple Lines of Evidence

Data have been collected by different means and from several sources which are as follows:

- Desk review of relevant documents;
- Key informant interviews with use of interview protocols that included main evaluation questions;
- Case studies of selected countries including site visits to selected project locations, and further collection of relevant facility documents.

The data have been collected from both secondary and primary sources, in each case involving quantitative and qualitative data. The secondary sources comprise files, documents and literature, and to the extent available, databases.

The amount of documentation related to the project is substantial due to the complexity and the length of the project and the number of activities implemented over six and a half year. The documents made available to the evaluation team contain essential information about the conceptualization, design, implementation, monitoring, self-evaluation and reporting of the project.

Desk review

The desk review was be undertaken in two phases. Phase 1 occurred at the outset of the evaluation and involved documents provided by UNIDO during the inception phase and was complemented by other important documents that came to the evaluators' attention. During Phase 2, additional important documents such as regional and state-level documents were reviewed that emerged during the country visits.

Annex 1 comprises The List of documents reviewed.

Key Informant Interviews

The purpose of key informant interviews is to gather information on the vital aspects of the project at national and regional levels. The interviews are an important means of clarifying information, successes and issues as well as discussing personal experiences of most significant changes introduced by and/or resulted from the project.

The interviews were semi-structured in nature; and did not exceed one hour. They were designed to obtain robust qualitative feedback from several respondents. Face-to-face interviews were conducted with respondents located in the visited cities and by Skype and telephone when it was impossible to organize a face-to-face meeting.

The List of stakeholders provided by UNIDO was used for the convenience sampling of interview participants. This resulted in a balanced representation of all relevant stakeholder groups in each selected project location.

Key informant interviews were conducted with country, regional or global level stakeholders including representatives of the target governments, regional and national regulatory agencies, intergovernmental/ international organizations, pharma industry, NGO, universities and trainers involved in the project.

Country Visits/ Missions

The country visits comprised one or two consulting days in each country and provided opportunities for key informant interviews and observations.

The countries selected for country visits, Ethiopia, Ghana, Kenya, Tanzania, Zimbabwe, were determined by UNIDO Independent Evaluation Division based on the range of activities conducted in the respected county. Additional missions were scheduled to meet representatives of the West African Health Organization in Bobo-Dioulasso, Burkina Faso; and officers of UN agencies who participated in the implementation of the project and based in Geneva, Switzerland.

Due to security reasons mission to Ethiopia and Burkina Faso were cancelled. Instead, data from key informants based on those locations were collected by other means, including virtual meeting via Skype and completion of questionnaire.

The List of interviewees is included in Annex 1.

Data Collection Tools, Instruments, Protocols

The data collection tools, instruments and protocols are presented in the Annexes.

Sampling

A convenience sampling was proposed for gaining in-depth knowledge through KIIs on the implementation, outputs, outcomes and impacts of the project and on what worked well and what did not work well in the selected countries; and which are the emerging/emerged results for improved supply, availability, accessibility and affordability of effective, quality-assured essential medicines.

Data Limitations

While the ultimate aim of the project was the same in all participating countries the varying context and situations of the different target countries affected the availability,

quality and comparability of data. Due to the lack of baseline data or survey no comparative end-line survey is possible.

Data Reliability and Validity

As discussed in section 3.6 Data analysis in the UNIDO Evaluation Manual once the validity, reliability and completeness of data has been verified, different data sets were analysed.

With respect to reliability, great care has been taken in defining the questions and presenting them in the different data collection tools so that they will elicit similar responses from all respondents. As for validity, the proposed data collection instruments were consistent. Fundamentally, data reliability and validity were enhanced by using multiple lines of evidence and triangulating the available data.

Triangulation

Triangulation is a technique that facilitates the validation of data through cross verification from three or more methods and/or sources. The design of the evaluation included data being collected by several methods and from a number of sources, incorporating both methodological and data triangulation. The application and combination of research methods (document review; key informant interviews; site visits and observations) generated data from different sources and locations as well as from a variety of people.

In terms of evaluator triangulation, two evaluators conducted the data collection during the same period of time, using the same protocols and questionnaires. The evaluation team members communicated with each other regularly in order to clarify any procedures, questions or observations.

Data analyses

Data collected from all primary and secondary sources were analysed in five steps:

Step 1. Data analysis was undertaken using NVivo software for qualitative data and Excel software for quantitative data. For the analysis, the responses were summarized by classifications such as country and name of the activity, outcomes, indicators and impacts (these served as “nodes”). The NVivo analysis software was then used to generate queries that permitted a search for codes used for each evaluation question. NVivo helped the evaluators find patterns and occurrences or terms and key phrases that were significant or repeated among the contents from data sources.

Step 2. Based on Step 1, and a reconstructed Theory of Change was be formulated.

Step 3. Based on Steps 1 and 2. Once the data were analysed the interpretation of data findings have been done by the evaluation team, first individually and then by group review, from the established dimensions of relevance, effectiveness, efficiency, sustainability, impact and cross-cutting themes of gender, social inclusion and environmental protection and answers to the high-level evaluation questions will be formulated, which resulted in conclusions.

Step 4. Based on Step 3, recommendations were formulated in a forward-looking mode.

Step 5. Based on steps 1-3, lessons learnt were extracted.

Quality Assurance

Quality assurance (QA) was conducted in two phases.

The evaluation team leader was responsible for assuring the quality of the processes and the implementation of the evaluation during the whole evaluation process.

UNIDO Independent Evaluation Division assisted the evaluation team at strategic points with reviewing the development of deliverables and made suggestions for improvement before approving the deliverables.

The quality of the data collected was assured in various ways, including the following:

- Both evaluators were bound by the same evaluation norms and standards;

- The evaluators had an orientation to the project and its tools, including an orientation to NVivo usage, Key Informant Interview protocols. Protocols for key informant interviews provided detailed instructions on setting up, conducting, recording and reporting of methods. The instruments/ questionnaires were pilot tested and then revised, if required;
- The team leader provided continuing oversight of the work;

- Report writing was led by the evaluation team leader with tasks and specific components assigned to the other evaluator. The contents of analytical files/ documents and the final report were reviewed by each evaluator, with approval by the team leader of the final versions.

- After submission, UNIDO Independent Evaluation Division reviewed all written reports and check for omissions, errors and suggest improvements.

ANNEX 3: EVALUATION DESIGN MATRIX

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Key evaluation questions																								
1	Key evaluation question	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?	What are the key drivers and barriers to achieve the long term objectives?	Descriptive	X	X								X		X	X		X	X	X	X	X	
			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?	Descriptive		X	X	X						X		X	X	X	X	X	X	X	X	
2	Key evaluation question	How well has the project performed? Has the project done the right things? Has the project done things right, with good value for money?	How well has the project performed?	Descriptive		X	X							X	X	X	X	X	X	X	X	X	X	
			Has the project done the right things?	Descriptive		X						X	X	X	X	X	X	X	X	X	X	X	X	
			Has the project done things right, with good value for money?	Descriptive		X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	
3	Key evaluation question	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 will the achieved results sustain after the completion of the project?	What have been the project's key results (outputs, outcome and impact)?	Descriptive									X	X	X	X	X	X	X	X	X	X	X	
			To what extent have the expected results been achieved or are likely to be achieved?	Descriptive		X								X	X	X	X	X	X	X	X	X	X	
			To what extent will the achieved results sustain after the completion of the project?	Descriptive						X				X		X	X	X	X	X	X	X	X	
4	Key evaluation question	What lessons can be drawn from the successful and unsuccessful practices in project design, implementation and management?		Descriptive				X	X				X	X		X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Relevance																								
5	Relevance	How does the project fulfil the urgent target group needs?		Descriptive / Cause & effect	X			X				X		X	X	X	X	X	X	X	X	X	X	
6	Relevance	To what extent is the project aligned with the development priorities of the country (national poverty reduction strategy, sector development strategy)?		Descriptive	X			X				X		X		X	X	X	X	X	X	X	X	
7	Relevance	How does project reflect donor policies and priorities?		Descriptive	X	X		X				X				X	X	X	X	X	X	X	X	
8	Relevance	Is the project a technically adequate solution to the development problem? Does it eliminate the cause of the problem?	Is the project a technically adequate solution to the development problem?	Descriptive	X	X		X			X	X		X		X	X	X	X	X	X	X	X	
			Does it eliminate the cause of the problem?	Descriptive	X	X						X		X		X	X	X	X	X	X	X	X	
9	Relevance	To what extent does the project correspond to UNIDO's comparative advantages?		Descriptive	X	X		X						X		X	X	X	X	X	X	X	X	
10	Relevance	Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have they been revised? Are the revised objectives still valid in today's context?	Are the original project objectives (expected results) still valid and pertinent to the target groups?	Descriptive	X	X					X	X		X		X	X	X	X	X	X	X	X	
			If not, have they been revised?	Descriptive	X							X		X		X	X	X	X	X	X	X	X	
			Are the revised objectives still valid in today's context?	Descriptive	X							X		X		X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Effectiveness																								
11	Effectiveness	What are the main results (mainly outputs and outcomes) of the project? What have been the quantifiable results of the project?	What are the main results (mainly outputs and outcomes) of the project?	Descriptive	X	X		X				X	X	X	X	X	X	X	X	X	X	X	X	
			What have been the quantifiable results of the project?	Descriptive		X							X	X	X	X	X	X	X	X	X	X	X	X	
12	Effectiveness	To what extent did the project achieve their objectives (outputs and outcomes), against the		Descriptive		X		X					X	X	X	X	X	X	X	X	X	X	X	X	
13	Effectiveness	What are the reasons for the achievement/non-achievement of the project objectives?		Descriptive / Cause & effect		X								X		X	X	X	X	X	X	X	X	X	
14	Effectiveness	What is the quality of the results? How do the stakeholders perceive them? What is the feedback of the beneficiaries and the stakeholders on the project effectiveness?	What is the quality of the results?	Descriptive		X	X	X					X	X		X	X	X	X	X	X	X	X	X	
			How do the stakeholders perceive them?	Descriptive		X		X	X			X		X		X	X	X	X	X	X	X	X	X	
			What is the feedback of the beneficiaries and the stakeholders on the project effectiveness?	Descriptive		X										X	X	X	X	X	X	X	X	X	
15	Effectiveness	To what extent is the identified progress result of the project rather than external factors?		Cause & effect	X	X						X		X		X	X	X	X	X	X	X	X	X	
16	Effectiveness	What can be done to make the project more effective?		Cause & effect		X						X		X		X	X	X	X	X	X	X	X	X	
17	Effectiveness	Were the right target groups reached?		Descriptive	X	X		X			X			X	X	X	X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Efficiency																								
18	Efficiency	How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?		Descriptive			X		X		X			X		X	X	X	X	X	X	X	X	
19	Efficiency	To what extent were expected results achieved within the original budget? If no, please explain		Normative			X							X		X	X	X	X	X	X	X	X	
20	Efficiency	Are the results being achieved at an acceptable cost? Would alternative approaches accomplish the same results at less cost?	Are the results being achieved at an acceptable cost?	Descriptive			X	X						X		X	X	X	X	X	X	X	X	
			Would alternative approaches accomplish the same results at less cost?	Cause & effect			X	X						X		X	X	X	X	X	X	X	X	
21	Efficiency	What measures have been taken during planning and implementation to ensure that resources are efficiently used?		Descriptive		X	X	X			X			X		X	X	X	X	X	X	X	X	
22	Efficiency	To what extent did the expected co-financing materialize, in cash or in-kind, grants or loan? Was co-financing administered by the project management or by some other organization? Did short fall in co-financing or materialization of greater than expected co-financing affected project results?	To what extent did the expected co-financing materialize, in cash or in-kind, grants or loan?	Normative		X								X		X	X	X	X	X	X	X	X	
			Was co-financing administered by the project management or by some other organization?	Descriptive		X			X					X		X	X	X	X	X	X	X	X	
			Did short fall in co-financing or materialization of greater than expected co-financing affected project results?	Descriptive		X								X		X	X	X	X	X	X	X	X	
23	Efficiency	Could more have been achieved with the same input?		Cause & effect		X	X	X						X		X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Efficiency																								
24	Efficiency	Could the same have been achieved with less input?		Cause & effect		X	X	X						X		X	X	X	X	X	X	X	X	
25	Efficiency	How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.		Descriptive		X	X	X				X		X		X	X	X	X	X	X	X	X	
26	Efficiency	To what extent were the project's activities in line with the schedule of activities as defined by the Project Team and annual Work Plans?		Descriptive		X	X	X						X		X	X	X	X	X	X	X	X	
27	Efficiency	Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements?		Descriptive			X		X					X		X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Sustainability																								
28	Sustainability	Will the project results and benefits be sustained after the end of donor funding?		Descriptive						X				X		X	X	X	X	X	X	X	X	
29	Sustainability	Does the project have an exit strategy?		Descriptive				X		X				X		X	X	X	X	X	X	X	X	
30	Sustainability	What is the likelihood of financial and economic resources not being available once the project ends?		Descriptive						X				X		X	X	X	X	X	X	X	X	
31	Sustainability	Are there any social or political risks that may jeopardize the sustainability of project outcomes?		Descriptive						X	X			X		X	X	X	X	X	X	X	X	
32	Sustainability	What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained?		Descriptive						X				X		X	X	X	X	X	X	X	X	
33	Sustainability	Do the various key stakeholders see that it is in their interest that project benefits continue to flow?		Descriptive					X	X		X		X		X	X	X	X	X	X	X	X	
34	Sustainability	Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?		Descriptive						X		X		X		X	X	X	X	X	X	X	X	
35	Sustainability	Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits?		Cause & effect						X				X		X	X	X	X	X	X	X	X	
36	Sustainability	Are requisite systems for accountability and transparency and required technical know-how in place?		Descriptive						X				X		X	X	X	X	X	X	X	X	
37	Sustainability	Are there any environmental risks that may jeopardize the sustainability of project outcomes?		Cause & effect						X	X			X		X	X	X	X	X	X	X	X	
38	Sustainability	Are there any project outputs or higher level results that are likely to have adverse environmental impacts, which, in turn, might affect the sustainability of project benefits?		Cause & effect						X				X		X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Cross-cutting performance criteria																								
Gender mainstreaming																								
39	Gender mainstreaming	Did the project design adequately consider the gender dimensions in its interventions? Was the gender marker assigned correctly at entry?	Did the project design adequately consider the gender dimensions in its interventions?	Descriptive				X			X			X	X	X	X	X	X	X	X	X	X	
			Was the gender marker assigned correctly at entry?	Descriptive				X			X			X		X	X	X	X	X	X	X	X	
40	Gender Mainstreaming	Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators?	Was a gender analysis included in a baseline study or needs assessment (if any)?	Descriptive				X			X			X	X	X	X	X	X	X	X	X	X	
			Were there gender-related project indicators?	Descriptive			X	X			X			X	X	X	X	X	X	X	X	X	X	
41	Gender mainstreaming	Are women/gender-focused groups, associations or gender units in partner organizations consulted/ included in the project?		Descriptive				X			X			X		X	X	X	X	X	X	X	X	
42	Gender mainstreaming	How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?		Descriptive				X	X		X			X		X	X	X	X	X	X	X	X	
43	gender mainstreaming	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)?	Do the results affect women and men differently? If so, why and how?	Cause & effect		X		X			X		X	X	X	X	X	X	X	X	X	X	X	
			How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)?	Descriptive /Cause & effect							X		X	X	X	X	X	X	X	X	X	X	X	
44	Gender mainstreaming	To what extent were socioeconomic benefits delivered by the project at the national and local levels, including		Descriptive		X					X		X	X	X	X	X	X	X	X	X	X	X	

Number	Main evaluation criteria	Evaluation questions	Evaluation subquestions	Type of question	Evaluaton criteria									Data sources						Data collection instrument				Comments/ Assumptions/ Limitations
					Relevance	Effectiveness	Efficiency	Appropriateness of Design	Partnership	Sustainability	Cross-cutting themes	Responsiveness	Impact	Document	Database	Interview	Focus group	Site visit	Survey	Doumentum coding structure	Key Informant Interview Guide	Focus Group Guide	Online survey	
Cross-cutting performance criteria																								
Environment and socio-economic aspects																								
45	Environmental aspects	What are the main environmental results of the project at the national and regional levels?		Descriptive /Cause & effect							X		X	X	X	X	X	X	X	X	X	X	X	
46	Socio-economic aspects	What are the main socioeconomical results of the project at the national and regional levels?		Descriptive /Cause & effect							X		X	X	X	X	X	X	X	X	X	X	X	
Progress to impact																								
47	Impact	What is the likelihood to contribute to the expected impact?		Descriptive								X		X		X	X	X	X	X	X	X	X	
48	Impact	What are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and to what extent do conditions for trajectory change are being put into place?		Descriptive	X							X		X	X	X	X	X	X	X	X	X	X	
49	Impact	To what extent the project's specific results (e.g. methodology, technology, lessons, etc.) are reproduced or adopted?		Descriptive								X		X		X	X	X	X	X	X	X	X	
50	Impact	To what extent information, lessons or specific results of the project are incorporated into broader stakeholder mandates and initiatives such as laws,		Descriptive								X		X		X	X	X	X	X	X	X	X	
51	Impact	To what extent the project's initiatives and results are implemented at larger geographical scale?		Descriptive								X		X	X	X	X	X	X	X	X	X	X	
52	Impact	What difference has the project made to the beneficiaries?		Descriptive /Cause &								X		X	X	X	X	X	X	X	X	X	X	
53	Impact	What is the change attributable to the project? To what extent?		Descriptive /Cause &		X						X		X	X	X	X	X	X	X	X	X	X	
54	Impact	What are the social, economic, environmental and other effects, either short-, medium- or long-term, on a micro- or macro-level?		Descriptive /Cause & effect	X					X		X		X		X	X	X	X	X	X	X	X	
55	Impact	What effects are intended or unintended, positive or negative?		Descriptive	X							X		X		X	X	X	X	X	X	X	X	

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UNIDO impact dimensions																								
Environment																								
56	UNIDO impact dimension	To what extent the project contributes to changes in the status of environment?		Descriptive /Cause & effect						X		X		X	X	X	X	X	X	X	X	X	X	
Economic performance																								
57	Economic performance	To what extent the project contributes to changes in the economic performance (e.g. finances, income, costs saving, expenditure) of individuals, groups and entities?		Descriptive /Cause & effect		X						X		X	X	X	X	X	X	X	X	X	X	
Social inclusiveness																								
58	Social inclusiveness	To what extent the project contributes to changes in capacity and capability of individuals, groups and entities in society, such as employment, education, and training?		Descriptive /Cause & effect	X							X		X	X	X	X	X	X	X	X	X	X	
59	Social inclusiveness	Was the project design adequate to address the problems at hand?		Descriptive				X						X		X	X	X	X	X	X	X	X	
60	Social inclusiveness	Is the project consistent with the Country's priorities, in the work plan of the lead national counterpart? Does it meet the needs of the target group? Is it consistent with UNIDO's Inclusive and Sustainable Industrial Development? Does it adequately reflect lessons learnt from past projects? Is it in line with the donor's priorities and policies?	Is the project consistent with the Country's priorities, in the work plan of the lead national counterpart?	Descriptive	X			X						X		X	X	X	X	X	X	X	X	
			Does the project meet the needs of the target group?	Descriptive	X							X		X	X	X	X	X	X	X	X	X	X	
			Is the project consistent with UNIDO's Inclusive Industrial Development?	Descriptive	X									X		X	X	X	X	X	X	X	X	
			Is the project consistent with UNIDO's Sustainable Industrial Development?	Descriptive	X			X						X		X	X	X	X	X	X	X	X	
			Does the project adequately reflect lessons learnt from past projects?	Descriptive	X							X		X		X	X	X	X	X	X	X	X	
			Is the project in line with the donor's priorities and policies?	Descriptive	X			X	X					X		X	X	X	X	X	X	X	X	

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UNIDO impact dimensions																								
Social inclusiveness																								
61	Social inclusiveness	Is the applied project approach sound and appropriate? Is the design technically feasible and beased on best practices? Does UNIDO have in-house technical expertise and experience for this type of intervention?	Is the applied project approach sound and appropriate?	Descriptive				X						X		X	X	X	X	X	X	X	X	
			Is the design technically feasible and based on best practices?	Descriptive				X						X		X	X	X	X	X	X	X	X	
			Does UNIDO have in-house technical expertise and experience for this type of intervention?	Descriptive	X			X	X					X		X	X	X	X	X	X	X	X	
62	Social inclusiveness	To what extent the project design (in terms of funding, institutional arrangement, implementation arrangements…) as foreseen in the project document still valid and relevant?		Descriptive	X			X						X					X	X	X	X	X	
63	Social inclusiveness	Does the project document include a M&E plan? Does the M&E plan specify what, who and how frequent monitoring, review, evaluations and data collection will take place? Does it allocate budget for each exercise? Is the M&E budget adequately allocated and consistent with the logframe (especially indicators and sources of verification)?	Does the project document include a M&E plan?	Descriptive				X						X					X	X	X	X	X	
			Does the M&E plan specify what, who and how frequent monitoring, review, evaluations and data collection will take place?	Descriptive				X						X					X	X	X	X	X	
			Does the M&E plan allocate budget for each exercise?	Descriptive				X						X					X	X	X	X	X	
			Is the M&E budget adequately allocated and consistent with the logframe (especially indicators and sources of verification)?	Descriptive				X						X		X	X	X	X	X	X	X	X	
64	Social inclusiveness	Were there any changes in project design and/or expected results after start of implementation?		Descriptive		X		X						X		X	X	X	X	X	X	X	X	
65	Social inclusiveness	Did the project establish a baseline (initial conditions)? Was the evaluation able to estimate the baseline conditions so that results can be determined?	Did the project establish a baseline (initial conditions)?	Descriptive				X						X	X				X	X	X	X	X	
			Was the evaluation able to estimate the baseline conditions so that results can be determined?	Descriptive				X						X	X				X	X	X	X	X	

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UNIDO impact dimensions																								
Social inclusiveness																								
66	Social inclusiveness	Are critical risks related to financial, social-political, institutional, environmental and implementation aspects identified with specific risk ratings? Are their mitigation measures identified? Where possible, are the mitigation measures included in project activities/outputs and monitored under the M&E plan?	Are critical risks related to financial, social-political, institutional, environmental and implementation aspects identified with specific risk ratings?	Descriptive		X		X						X					X	X	X	X	X	
			Are their mitigation measures identified?	Descriptive		X		X						X					X	X	X	X	X	
			Where possible, are the mitigation measures included in project activities/outputs and monitored under the M&E plan?	Descriptive		X		X						X					X	X	X	X	X	
67	Social inclusiveness	Is the expected result-chain (impact, outcomes and outputs) clear and logical? Does impact describe a desired long-term benefit to a society or community (not as a mean or process), do outcomes describe change in target group's behaviour/performance or system/institutional performance, do outputs describe deliverables that project will produce to achieve outcomes? Are the expected results realistic, measurable and not a reformulation or summary of lower level results? Do outputs plus assumptions lead to outcomes, do outcomes plus assumptions lead to impact? Can all outputs be delivered by the project, are outcomes outside UNIDO's control but within its influence?	Is the expected result-chain (impact, outcomes and outputs) clear and logical?	Descriptive	X		X					X		X				X	X	X	X	X	X	
			Does impact describe a desired long-term benefit to a society or community (not as a mean or process), do outcomes describe change in target group's behaviour/performance or system/institutional performance, do outputs describe deliverables that project will produce to achieve outcomes?	Descriptive /Cause & effect	X		X					X		X					X	X	X	X	X	X	
			Are the expected results realistic, measurable and not a reformulation or summary of lower level results?	Descriptive								X		X		X	X	X	X	X	X	X	X	
			Do outputs plus assumptions lead to outcomes, do outcomes plus assumptions lead to impact?	Descriptive	X		X					X		X		X	X	X	X	X	X	X	X	
			Can all outputs be delivered by the project, are outcomes outside UNIDO's control but within its influence?	Descriptive	X		X							X		X	X	X	X	X	X	X	X	

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UNIDO impact dimensions																								
Social inclusiveness																								
68	Social inclusiveness	Do indicators describe and specify expected results (impact, outcomes and outputs) in terms of quantity, quality and time? Do indicators change at each level of results and independent from indicators at higher and lower levels? Do indicators not restate expected results and not cause them? Are indicators necessary and sufficient and do they provide enough triangulation (cross-checking)? Are they indicators sex-diaggregated, if applicable?	Do indicators describe and specify expected results (impact, outcomes and outputs) in terms of quantity, quality and time?	Descriptive	X	X						X		X		X	X	X	X	X	X	X	X	
			Do indicators change at each level of results and independent from indicators at higher and lower levels?	Descriptive			X							X					X	X	X	X	X	
			Do indicators not restate expected results and not cause them?	Descriptive			X							X					X	X	X	X	X	
			Are indicators necessary and sufficient and do they provide enough triangulation (cross-checking)?	Descriptive			X							X	X				X	X	X	X	X	
			Are the indicators sex-diaggregated, if applicable?	Descriptive			X							X	X				X	X	X	X	X	
69	Social inclusiveness	Are the sources of verification/data able to verify status of indicators, are they cost-effective and reliable? Are the sources of verification/data able to verify status of output and outcome indicators before project completion?	Are the sources of verification/data able to verify status of indicators, are they cost-effective and reliable?	Descriptive		X	X							X	X				X	X	X	X	X	
			Are the sources of verification/data able to verify status of output and outcome indicators before project completion?	Descriptive			X							X	X				X	X	X	X	X	

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UNIDO impact dimensions																								
Project management																								
70	Project management	Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.	Have changes been made and are they effective?	Descriptive /Cause & effect		X						X	X	X		X	X	X	X	X	X	X	X	
			Are responsibilities and reporting lines clear?	Descriptive		X		X			X			X		X	X	X	X	X	X	X	X	
			Is decision-making transparent and undertaken in a timely manner?	Descriptive		X		X						X		X	X	X	X	X	X	X	X	
			Recommend areas for improvement.	Descriptive	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
71	Project management	To what extent the national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions)?	To what extent the national management and overall coordination mechanisms have been efficient and effective?	Descriptive		X		X						X		X	X	X	X	X	X	X	X	
			Did each partner have assigned roles and responsibilities from the beginning?	Descriptive		X		X	X					X		X	X	X	X	X	X	X	X	
			Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions)?	Descriptive				X	X		X			X		X	X	X	X	X	X	X	X	
72	Proejct management	The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?		Descriptive		X	X	X						X		X	X	X	X	X	X	X	X	
73	Project management	Does the project implemented outreach and public awareness campaigns? Outreach and public awareness materials produced are in line with the relevant UNIDO and donor advocacy guidelines?"	Does the project implemented outreach and public awareness campaigns?	Descriptive				X						X		X	X	X	X	X	X	X	X	
			Outreach and public awareness materials produced are in line with the relevant UNIDO and donor advocacy guidelines?"	Descriptive				X	X					X		X	X	X	X	X	X	X	X	

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UNIDO impact dimensions																								
M&E design																								
74	M&E design	Was the Monitoring plan at the point of project approval practical and sufficient?		Descriptive				X						X		X	X	X	X	X	X	X	X	
75	M&E design	Did it include baseline data and specify clear targets and appropriate indicators to track environmental, gender, and socio economic results?		Descriptive		X	X	X			X		X	X	X	X	X	X	X	X	X	X	X	
76	M&E design	Did it include a proper M&E methodological approach; specify practical organization and logistics of the M&E activities including schedule and responsibilities for data collection?		Descriptive			X	X						X		X	X	X	X	X	X	X	X	
77	M&E implementation	Did it include budget adequate funds for M&E activities?		Descriptive			X	X			X			X		X	X	X	X	X	X	X	X	
M&E implementation																								
78	M&E implementation	How was the information from M&E system used during the project implementation? Was an M&E system in place and did it facilitate timely tracking of progress toward project results by collecting information on selected indicators continually throughout the project implementation period? Did project team and manager make decisions and corrective actions based on analysis from M&E system and based on results achieved?	How was the information from M&E system used during the project implementation?	Descriptive			X	X			X			X		X	X	X	X	X	X	X	X	
			Was an M&E system in place and did it facilitate timely tracking of progress toward project results by collecting information on selected indicators continually throughout the project implementation period?	Descriptive				X			X			X		X	X	X	X	X	X	X	X	
			Did project team and manager make decisions and corrective actions based on analysis from M&E system and based on results achieved?	Descriptive				X			X			X		X	X	X	X	X	X	X	X	
79	M&E implementation	Are annual/progress project reports complete and accurate?		Normative					X					X					X	X	X	X	X	

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UNIDO impact dimensions																								
M&E implementation																								
80	M&E implementation	Was the information provided by the M&E system used to improve performance and adapt to changing needs? Was information on project performance and results achievement being presented to the Project Steering Committee to make decisions and corrective actions? Do the Project team and managers and PSC regularly ask for performance and results information?	Was the information provided by the M&E system used to improve performance and adapt to changing needs?	Descriptive		X	X	X			X			X	X	X	X	X	X	X	X	X	X	
			Was information on project performance and results achievement being presented to the Project Steering Committee to make decisions and corrective actions?	Descriptive						X				X					X	X	X	X	X	
			Do the Project team and managers and PSC regularly ask for performance and results information?	Descriptive					X					X					X	X	X	X	X	
81	M&E implementation	Are monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impact in the logframe? Do performance monitoring and reviews take place regularly?	Are monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impact in the logframe?	Descriptive		X			X					X		X	X	X	X	X	X	X	X	
			Do performance monitoring and reviews take place regularly?	Descriptive				X	X		X			X					X	X	X	X	X	
82	M&E implementation	Were resources for M&E sufficient?		Normative				X			X			X		X	X	X	X	X	X	X	X	
83	M&E implementation	How has the logframe been used for Monitoring and Evaluation purposes (developing M&E plan, setting M&E system, determining baseline and targets, annual implementation review by the Project Steering Committee…) to monitor progress towards expected outputs and outcomes?		Descriptive		X		X	X		X			X		X	X	X	X	X	X	X	X	
84	M&E implementation	How well have risks outlined the project document and in the logframe been monitored and managed? How often have risks been reviewed and updated? Has a risk management mechanism been put in place?	How well have risks outlined the project document and in the logframe been monitored and managed?	Descriptive	X	X		X	X		X			X					X	X	X	X	X	
			How often have risks been reviewed and updated?	Descriptive		X		X	X		X			X					X	X	X	X	X	
			Has a risk management mechanism been put in place?	Descriptive		X		X			X			X					X	X	X	X	X	

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Performance of partners																								
UNIDO Design																								
85	UNIDO performance	Were adequate technical expertise mobilized for the project design?		Descriptive				X	X					X		X	X	X	X	X	X	X	X	
86	UNIDO performance	What is the inclusiveness of project design (with national counterparts)?		Descriptive				X	X					X		X	X	X	X	X	X	X	X	
87	UNIDO performance	Are previous evaluative evidence shaping project design?		Descriptive				X			X		X	X		X	X	X	X	X	X	X	X	
88	UNIDO performance	Does the design plans for M&E and ensures sufficient M&E budget?		Descriptive / Normative				X			X			X		X	X	X	X	X	X	X	X	
UNIDO Implementation																								
89	UNIDO Implementation	To what extent timely recruitment of project staff takes place?		Descriptive		X	X	X						X		X	X	X	X	X	X	X	X	
90	UNIDO Implementation	To what extent the project modified following changes in context or after the Mid-Term Review?		Descriptive		X		X			X		X	X		X	X	X	X	X	X	X	X	
91	UNIDO Implementation	Is follow-up address the implementation bottlenecks?		Descriptive		X		X			X		X	X		X	X	X	X	X	X	X	X	
92	UNIDO Implementation	What is the role of UNIDO country presence (if applicable) supporting the project?		Descriptive		X		X						X		X	X	X	X	X	X	X	X	
93	UNIDO Implementation	Is engagement in policy dialogue ensure up-scaling of innovations?		Descriptive		X			X				X	X		X	X	X	X	X	X	X	X	
94	UNIDO Implementation	What is the coordination function?		Descriptive		X		X	X					X		X	X	X	X	X	X	X	X	
95	UNIDO Implementation	How is the exit strategy? Is it planned together with the government?	How is the exit strategy?	Descriptive		X		X		X			X	X		X	X	X	X	X	X	X	X	
			Is it planned together with the government?	Descriptive		X		X	X	X	X		X	X		X	X	X	X	X	X	X	X	

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Performance of partners																								
National counterparts Design																								
96	National counterparts Design	What is the responsiveness to UNIDO's invitation for engagement in designing the project?		Descriptive		X		X	X					X		X	X	X	X	X	X	X	X	
National counterparts Implementation																								
97	National counterparts implementation	What is the ownership of the project?		Descriptive		X			X	X			X	X		X	X	X	X	X	X	X	X	
98	National counterparts implementation	What is the support to the project (based on actions and policies)?		Descriptive					X	X	X		X	X		X	X	X	X	X	X	X	X	
99	National counterparts implementation	What counterpart funding the project?		Descriptive				X	X	X				X		X	X	X	X	X	X	X	X	
100	National counterparts implementation	Does the exit strategy, planned together with UNIDO, or arrangements for continued funding of certain activities?		Descriptive		X		X	X	X			X	X		X	X	X	X	X	X	X	X	
101	National counterparts implementation	Were the facilitation of the participation of Non-Governmental Organizations(NGOs), civil society and the private sector appropriate?		Descriptive		X			X					X		X	X	X	X	X	X	X	X	
102	National counterparts implementation	What would be suitable procurement procedures for timely project implementation?		Descriptive /Cause & effect		X		X						X		X	X	X	X	X	X	X	X	
103	National counterparts implementation	To what extent the engagement with UNIDO in policy dialogue promote the up-scaling or replication of innovations?		Descriptive						X			X	X		X	X	X	X	X	X	X	X	
104	National counterparts implementation	To what extent appropriate use of funds, procurement and contracting of goods and services implement in the project?		Descriptive		X	X	X	X					X		X	X	X	X	X	X	X	X	

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Performance of partners																								
Donor Implementation																								
105	**Donor implementation**	Is there timely disbursement of project funds?		Descriptive		X	X	X						X		X	X	X	X	X	X	X	X	
106	**Donor implementation**	What are the feedback to progress reports, including Mid-Term Evaluation?		Descriptive							X		X	X		X	X	X	X	X	X	X	X	
107	**Donor implementation**	To what extent is there support by the donor's country presence (if applicable) supporting the project for example through engagement in policy dialogue?		Descriptive		X			X					X		X	X	X	X	X	X	X	X	
108	**Donor implementation**	Does overarching assessment of the project, drawing upon the analysis made under Project Performance and Progress to Impact criteria above but not an average of ratings?		Descriptive									X	X		X	X	X	X	X	X	X	X	

ANNEX 4: LIST OF INTERVIEWEES

Name	Position	Organization
Jennifer Gache	Industrial Economist	EAC Secretariat
Thomas Walter	Senior expert	GFA Consulting Group
Wesley Ronoh	Regional expert	GFA Consulting Group
Wensaa Ephraim Muro	Executive Director & Principal	Kilimanjaro School of Pharmacy (KSP)
Kolonjoy Kayseye Olekiyapi	Principal	Kilimanjaro School of Pharmacy (KSP)
Juergen Reinhardt	Senior Industrial Development Officer and Project Manager	UNIDO
Alastair West	Senior Technical Advisor	UNIDO
Wilko von Kluechtzner	Associate Expert	UNIDO
Martin Nicholson	Senior Pharmaceutical Sector Expert	UNIDO
Corinna Heineke	Advisor	GIZ
Carlos Faria De Brito	Director of Epidemics & Diseases Control	WAHO
Dr. Jicui Dong	Programme Manager (Local Production), Regulation of Medicines and Other Health Technologies [RHT], Access to Medicines, Vaccines and Pharmaceuticals [MVP]	WHO HQ
Dr. Martin Friede	Coordinator, Initiative for Vaccine Research (IVR)	WHO HQ
Claudia Nannei	Health economist, vaccines	WHO HQ
Ermias Biadgleng	Legal Expert, Technology Transfer and Intellectual Property	UNCTAD
Joy Bakory	Expert	UNAIDS
Mariatou Tala Jallow	Senior Manager Global Sourcing of Pharmaceuticals and Health Products at The Global Fund to Fight AIDS, Tuberculosis and Malaria	The Global Fund to Fight AIDS, Tuberculosis and Malaria
Dr. Jacinta Wasike	Director, Inspection Surveillance and Enforcement	Pharmacy and Poison's Board, Kenya

Name	Position	Organization
Dr. Sarah Chesaro	Assistant Chief Pharmacist	Pharmacy and Poison's Board, Kenya
Dr. Rohin Vora	Past Chairman	Federation of Kenya Pharmaceutical Manufacturers
	Chief Executive Officer	Regal Pharmaceuticals Ltd
Dr. Wanyanga Wilberforce	Former UNIDO LPP Project Coordinator, Kenya	
Mr. William Wekwete	Head of of Evaluation and Registration	Medicines Control Authority of Zimbabwe
Mr. Admire Nyika	Senior Regulatory Officer – Licensing and Enforcement	Medicines Control Authority of Zimbabwe
Mr. Richard Rukwata	Head – Licensing and Enforcement	Medicines Control Authority of Zimbabwe
Dr. Nigel Chanakira	Former UNIDO Senior National Adviser – Pharmaceutical Industry Development	
Ishe Nkomo	Former UNIDO National Project Coordinator	
Emmanuel Mujuru	Chairman of the Board	Pharmaceutical Manufacturers Association, Zimbabwe Federation of African Pharmaceutical Manufacturers Association
Mr. Kwaku Adjei-Fosu	Deputy Director, Plan Coordination Division,	National Development Planning Commission, Ghana
Mr. Seth Seaneke	Principal Regulatory Officer	Food and Drugs Authority (FDA), Ghana
Ms. Agnes Koufie	Regulatory Officer	Food and Drugs Authority (FDA), Ghana
Christopher Atta-Nyarko	Regulatory Officer	Food and Drugs Authority (FDA), Ghana
Prof William Ampofo	Chairman	AVMI
Mr. Louis Nortey	Former UNIDO LPP Project Coordinator, Ghana	

ANNEX 5: Data Collection Tools

Key informant interviews

Annex 5/1 - KEY INFORMANT INTERVIEW PROTOCOL

1. Purpose of the Interview protocol

The purpose of the Interview protocol is to support the evaluation interviewers in planning and executing key informant interviews for the Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 by bringing together all necessary information for the interviews.

2. Purpose of Interviews

The purpose of key informant interviews is to provide information on the key aspects of the project in relation to the evaluation criteria. The interviews are an important means of obtaining information on the program's design, development, implementation, governance and results. Even though documentary evidence will be collected of the project's objectives/goals, the resources used in project delivery and the kinds of results achieved, that evidence often needs to be clarified and contextualized. The issue of why and how one thing or another was done is frequently not well documented and those involved in the project will likely be the only source of that information. Finally, interview data are required to address several of the evaluation questions included in the Evaluation Matrix. The perceptions of the various project players are key indicators of the project's process and outcomes.

3. Interview Categories

Five versions of the key informant interview questionnaire are required for: (1) Ministries and other national governmental bodies; (2) Regional and national regulatory agencies; (3) UN agencies and other international organizations participated in the implementation of the project; (4) Regional and national associations of pharmaceutical manufacturers and their members; and (5) Universities.

4. Question Distribution

Key informant interview questionnaires were developed for each category of interview, against the questions presented in the Evaluation Matrix.

5. The Interview Process – Preparation

5.1 Sample Frame

The distribution of the key informant interviews is based on the document *Information for mission planning* provided by UNIDO. The individuals listed may be past as well as current employees/contractors involved with the project. All of the individuals on the list are sent the Notification Letter and invited to participate in the interviews.

Table: Key Informant Interviews Distribution by Interviewee Category

Interviewee Category	# Interviews
(1) Ministries and other national governmental bodies	1
(2) Regional and national regulatory agencies	8
(3) UN agencies and other international/ intergovernmental organizations participated in the implementation of the project	15
(4) Regional and national associations of pharmaceutical manufacturers and their member organizations	4
(5) Universities	2
(6) Other	3
Total	33

5.2 Interview Questionnaires

Five interview questionnaires are to be used corresponding to the five categories of key informants cited above. In some instances, an interviewee may wish, at the start of the interview, to provide an overview of their operations or main speaking points relative to the evaluation. The interviewer is to retain the written version of that briefing, if any, for inclusion in the interview documentation.

5.3 Notification Letter

A Notification Letter about the evaluation will be sent in advance to the persons selected for the key informant interview.

5.4 Privacy

The protection of the privacy of interviewees and their information is a critical concern of UNIDO and the evaluation team. It will be assured in two ways:

- The Notification Letter and this Interview protocol will be reviewed and approved by UNIDO Independent Evaluation Division and,
- Each interviewer will protect the confidentiality of each interviewee and ensure that individual comments are not traceable to a particular source in reports or documents made available to anyone outside of the evaluation team.

5.5 Interview Languages

Each interview will be conducted in English.

5.6 Appointments

To make appointments, email addresses of the potential interviewee, provided by UNIDO, will be utilized. When contacting them the approximate duration of the interview, one hour, will be indicated.

6. Execution of the Interviews

6.1 Distribution of the Notification Letter

Persons identified by UNIDO will be invited to participate in an interview. It is important to note that participation is voluntary and that the relationship between a potential interviewee and UNIDO will not be adversely affected if an interviewee declines to participate for whatever reason.

6.2 Distribution of the Interview Questionnaire

When a person indicates a willingness to participate in an interview, the questionnaire corresponding to his/her organization type will be dispatched within 48 hours by e-mail. The respondent will have at least 48 hours to review the questionnaire before the interview date.

6.3 Pre-Testing of the Interview Questionnaire

The first interview in each of the five categories will serve as a pre-test for each of the questionnaires. If there is a problem, immediate adjustments will be made by the evaluation team. Dr Agnes Czimbalmos will then contact UNIDO Independent Evaluation Division to indicate the problem that has been identified and outline the adjustments that have been made.

6.4 Recording of the Interview

The permission of interviewees to have the interview recorded is to be obtained by the interviewer when contacting the potential interviewee to schedule interviews. The recorded interviews must not contain the full name or other specific information to make the person's identity known. Interviews are recorded as the primary mechanism for documentary storage in the NVivo system as configured for this evaluation.

6.5 Annotating Interview Responses and Data Entry into NVivo

The interview recording is entered by the interviewer into NVivo as an audio file. The interviewer subsequently codes the responses to interview questions, and any additional discussion, using the NVivo coding system. Wherever coding is done, the interviewer is to make annotations summarizing the verbal responses.

Annex 5/2 Notification letter to key informants

(to be sent by email from the UNIDO email address of the evaluator)

Dear [Prospective Interviewee's name]

The independent Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 has been commissioned by UNIDO Independent Evaluation Division while two independent experts specialized in program/project evaluation has been contracted to conduct the evaluation.

The overall purpose of the evaluation is to assess whether the project has achieved or is likely to achieve its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. It also aims to draws lessons and develop recommendations for UNIDO, the governments, donors, the stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

A key component of the evaluation is to conduct interviews, focus group discussions with, or survey individuals with knowledge of the project and/or its impacts. You are being invited to participate in the evaluation due to your interest and involvement in the project. Your participation would greatly assist in the successful completion of our work.

We want to stress that your participation in this evaluation is completely voluntary and that your acceptance or refusal to participate will not affect your relationship with UNIDO. The evaluation will be administered in accordance with all international and national privacy provisions and laws. Your specific interview responses will not be attributed to you in any evaluation report resulting from this study.

The interview needs to be done [between 6 May and 7 June 2019].

It is expected that the interview will last approximately one hour.

If you would like to have more information about the evaluation, please contact Dr. Agnes Czimbalmos (A.Czimbalmos@unido.org).

Yours sincerely,

Name of the evaluator

Evaluator

Annex 5/3 Key informant questionnaires

Annex 5/3/1

Group 1 Questionnaire for Representatives of National Government

Presentation of the Evaluation

The independent Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 has been commissioned by UNIDO Independent Evaluation Division while two independent experts specialized in program/project evaluation has been contracted to conduct the evaluation.

The overall purpose of the evaluation is to assess whether the project has achieved or is likely to achieve its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. It also aims to draws lessons and develop recommendations for UNIDO, the governments, donors, the stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

A key component of the evaluation is to collect data using documents, interviews, focus groups and surveys. Data collection will be done at the regional and country levels.

You have been selected to participate in the Key Informant Interviews. You are asked to be open and frank in responding to all of our questions as the information you provide will form a key part of the findings and recommendations. We want to stress that your participation in this interview is completely voluntary and that your acceptance or refusal to participate will not affect your relationship with UNIDO or other organizations implemented the project. The information you will provide is for the purposes of the evaluation only.

The evaluation is being administered in accordance with all international and national privacy laws, policies and provisions. Your specific interview responses will not be attributed to you in any evaluation report resulting from this study.

Identification

Name of organization:	
Location of organization:	
Position of interviewee:	
Date of Interview (y/m/d):	
Time of Interview (from h/m - to h/m):	

Part 1: General

1. What has been your involvement with the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) project? Which parts of the project were you involved?

Part 2: Relevance

2. What are the key drivers and barriers to achieve the long-term objectives of the project?

3. How does the project fulfil the urgent target group needs?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

4. Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have they been revised? Are the revised objectives still valid in today's context?

Part 3: Effectiveness

5. How well has the project performed? Has the project done the right things?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

6. What are the main results (mainly outputs and outcomes) of the project?

7. How do the stakeholders perceive them?

8. To what extent is the identified progress result of the project rather than external factors?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

9. What are the reasons for the achievement/non-achievement of the project objectives?

10. To what extent is the identified progress result of the project rather than external factors?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

11. Were the right target groups reached?

12. How does the project fulfil the urgent target group needs?

1 Not at all	❒

2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 4: Efficiency

13. How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

14. Are the results being achieved at an acceptable cost? Would alternative approaches accomplish the same results at less cost?

15. How timely was the project in producing outputs and outcomes?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

16. Comment on the delay or acceleration of the project's implementation period.

Part 5: Sustainability

17. Will the project results and benefits be sustained after the end of donor funding?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

18. Does the project have an exit strategy?

Yes	❒
No	❒

Don't know	❒

19. What is the likelihood of financial and economic resources not being available once the project ends?

1 Highly unlikely	❒
2 Unlikely	❒
3 Moderately unlikely	❒
4 Likely	❒
5 Highly likely	❒

Don't know	❒

20. Are there any environmental risks that may jeopardize the sustainability of project outcomes? If yes, please explain.

Part 6: Gender Mainstreaming

21. Did the project design adequately consider the gender dimensions in its interventions?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

22. 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)?

Part 7: Environmental and socioeconomical results

23. What are the main environmental results of the project at the national and regional levels?

24. What are the main socioeconomical results of the project at the national and regional levels?

Part 8: Impact

25. What are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and to what extent do conditions for trajectory change are being put into place?

26. What difference has the project made to the beneficiaries?

27. To what extent the project contributes to changes in the economic performance (e.g. finances, income, costs saving, expenditure) of individuals, groups and entities?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don’t know	❒

28. To what extent the project contributes to changes in capacity and capability of individuals, groups and entities in society, such as employment, education, and training?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don’t know	❒

29. Is the project consistent with the Country's priorities, in the work plan of the lead national counterpart?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

30. Was the project design adequate to address the problems at hand?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 9: Project management

31. Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 10: Monitoring &Evaluation

32. How was the information from M&E system used during the project implementation? Was an M&E system in place and did it facilitate timely tracking of progress toward project results by collecting information on selected indicators continually throughout the project implementation period? Did project team and

manager make decisions and corrective actions based on analysis from M&E system and based on results achieved?

Part 11: UNIDO's role

33. What is the role of UNIDO country presence (if applicable) supporting the project?

Part 11: National counterparts

34. What is the ownership of the project?

35. What is the support to the project (based on actions and policies)?

Part 12: Donor

36. Is there timely disbursement of project funds?

Yes	❒
No	❒

Don't know	❒

Part 13: Other

Is there anything you would like to add to your interview responses?

Annex 5/3/2

Group 2 Questionnaire for Representatives of Regional and National Regulatory Agencies

Presentation of the Evaluation

The independent Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 has been commissioned by UNIDO Independent Evaluation Division while two independent experts specialized in program/project evaluation has been contracted to conduct the evaluation.

The overall purpose of the evaluation is to assess whether the project has achieved or is likely to achieve its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. It also aims to draws lessons and develop recommendations for UNIDO, the governments, donors, the stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

A key component of the evaluation is to collect data using documents, interviews, focus groups and surveys. Data collection will be done at the regional and country levels.

You have been selected to participate in the Key Informant Interviews. You are asked to be open and frank in responding to all of our questions as the information you provide will form a key part of the findings and recommendations. We want to stress that your participation in this interview is completely voluntary and that your acceptance or refusal to participate will not affect your relationship with UNIDO or other organizations implemented the project. The information you will provide is for the purposes of the evaluation only.

The evaluation is being administered in accordance with all international and national privacy laws, policies and provisions. Your specific interview responses will not be attributed to you in any evaluation report resulting from this study.

Identification

Name of organization:	
Location of organization:	
Position of interviewee:	
Date of Interview (y/m/d):	
Time of Interview (from h/m - to h/m):	

Part 1: General

1. What has been your involvement with the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) project? Which parts of the project were you involved?

Part 2: Relevance

2. To what extent is the project aligned with the development priorities of the country (national poverty reduction strategy, sector development strategy)?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

3. What are the key drivers and barriers to achieve the long-term objectives of the project?

4. How does the project fulfil the urgent target group needs?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

5. Is the project a technically adequate solution to the development problem? Does it eliminate the cause of the problem?

6. Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have they been revised? Are the revised objectives still valid in today's context?

Part 3: Effectiveness

7. What are the main results (mainly outputs and outcomes) of the project? How do the stakeholders perceive them?

8. What are the reasons for the achievement/non-achievement of the project objectives?

9. To what extent is the identified progress result of the project rather than external factors?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

10. Were the right target groups reached?

11. How does the project fulfil the urgent target group needs?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 4: Efficiency

12. How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?

1 Not at all	❒

2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

13. How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

14. Could more have been achieved with the same input?

15. Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements?

Part 5: Sustainability

16. Will the project results and benefits be sustained after the end of donor funding?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒

5 To a high extent	❒

Don't know	❒

17. Does the project have an exit strategy?

Yes		❒
No		❒

Don't know	❒

18. What is the likelihood of financial and economic resources not being available once the project ends?

1 Highly unlikely	❒
2 Unlikely	❒
3 Moderately unlikely	❒
4 Likely	❒
5 Highly likely	❒

Don't know	❒

19. Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits?

Part 6: Gender Mainstreaming

20. 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)?

21. How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?

Part 7: Environmental and socioeconomical results

22. What are the main environmental results of the project at the national and regional levels?

23. What are the main socioeconomical results of the project at the national and regional levels?

Part 8: Impact

24. What are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and to what extent do conditions for trajectory change are being put into place?

25. What difference has the project made to the beneficiaries?

26. To what extent the project contributes to changes in the economic performance (e.g. finances, income, costs saving, expenditure) of individuals, groups and entities?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

27. To what extent the project contributes to changes in capacity and capability of individuals, groups and entities in society, such as employment, education, and training?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

28. Was the project design adequate to address the problems at hand?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 9: Project management

29. Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.

30. To what extent the national management and overall coordination mechanisms have been efficient and effective?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 10: Monitoring &Evaluation

31. How was the information from M&E system used during the project implementation?

Part 11: UNIDO's role

32. Were adequate technical expertise mobilized for the project design and the implementation?

Part 11: National counterparts

33. What is the ownership of the project?

34. What is the support to the project (based on actions and policies)?

Part 12: Donor

35. Is there timely disbursement of project funds?

Yes	❒
No	❒

Don't know	❒

Part 13: Other

Is there anything you would like to add to your interview responses?

Annex 5/3/3

Group 3 Questionnaire for Representatives of Intergovernmental/ International Organizations

Presentation of the Evaluation

The independent Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 has been commissioned by UNIDO Independent Evaluation Division while two independent experts specialized in program/project evaluation has been contracted to conduct the evaluation.

The overall purpose of the evaluation is to assess whether the project has achieved or is likely to achieve its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. It also aims to draws lessons and develop recommendations for UNIDO, the governments, donors, the stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

A key component of the evaluation is to collect data using documents, interviews, focus groups and surveys. Data collection will be done at the regional and country levels.

You have been selected to participate in the Key Informant Interviews. You are asked to be open and frank in responding to all of our questions as the information you provide will form a key part of the findings and recommendations. We want to stress that your participation in this interview is completely voluntary and that your acceptance or refusal to participate will not affect your relationship with UNIDO or other organizations implemented the project. The information you will provide is for the purposes of the evaluation only.

The evaluation is being administered in accordance with all international and national privacy laws, policies and provisions. Your specific interview responses will not be attributed to you in any evaluation report resulting from this study.

Identification

Name of organization:	
Location of organization:	
Position of interviewee:	
Date of Interview (y/m/d):	
Time of Interview (from h/m - to h/m):	

Part 1: General

1. What has been your involvement with the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) project? Which parts of the project were you involved?

Part 2: Relevance

2. To what extent is the project aligned with the development priorities of the country (national poverty reduction strategy, sector development strategy)?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

3. How does project reflect donor policies and priorities?

4. Is the project a technically adequate solution to the development problem? Does it eliminate the cause of the problem?

Part 3: Effectiveness

5. What are the main results (mainly outputs and outcomes) of the project? How do the stakeholders perceive them?

6. To what extent did the project achieve their objectives (outputs and outcomes), against the original/revised target(s)?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

7. What are the reasons for the achievement/non-achievement of the project objectives?

8. Were the right target groups reached?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

9. What can be done to make the project more effective?

Part 4: Efficiency

10. How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

11. How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

12. Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements?

13. Are the results being achieved at an acceptable cost? Would alternative approaches accomplish the same results at less cost?

14. What measures have been taken during planning and implementation to ensure that resources are efficiently used?

Part 5: Sustainability

15. Will the project results and benefits be sustained after the end of donor funding?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

16. Does the project have an exit strategy?

Yes		❒
No		❒

Don't know	❒

17. Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?

18. Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits?

Part 6: Gender Mainstreaming

19. Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators?

20. How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 7: Environmental and socioeconomical results

21. What are the main environmental results of the project at the national and regional levels?

22. What are the main socioeconomical results of the project at the national and regional levels?

Part 8: Impact

23. What are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and to what extent do conditions for trajectory change are being put into place?

24. What difference has the project made to the beneficiaries?

25. To what extent information, lessons or specific results of the project are incorporated into broader stakeholder mandates and initiatives such as laws, policies, regulations and projects?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

26. What is the change attributable to the project? To what extent?

Part 9: Project management

27. Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

28. The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified

timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?

29. To what extent the national management and overall coordination mechanisms have been efficient and effective?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 10: Monitoring &Evaluation

30. Did the project include a proper M&E methodological approach; specify practical organization and logistics of the M&E activities including schedule and responsibilities for data collection?

31. Are annual/progress project reports complete and accurate?

32. How has the logframe been used for Monitoring and Evaluation purposes (developing M&E plan, setting M&E system, determining baseline and targets, annual implementation review by the Project Steering Committee…) to monitor progress towards expected outputs and outcomes?

Part 11: UNIDO's role

33. Were adequate technical expertise mobilized for the project design and the implementation?

34. Are previous evaluative evidence shaping project design?

35. To what extent timely recruitment of project staff takes place?

1 Not at all	❒

2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 11: National counterparts

36. What is the ownership of the project?

37. Does the exit strategy, planned together with UNIDO, or arrangements for continued funding of certain activities?

Part 12: Donor

38. To what extent is there support by the donor's country presence (if applicable) supporting the project for example through engagement in policy dialogue?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 13: Other

Is there anything you would like to add to your interview responses?

Annex 5/3/4

Group 4 Questionnaire for Pharmaceutical Manufacturers Associations and Pharmaceutical Industry

Presentation of the Evaluation

The independent Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 has been commissioned by UNIDO Independent Evaluation Division while two independent experts specialized in program/project evaluation has been contracted to conduct the evaluation.

The overall purpose of the evaluation is to assess whether the project has achieved or is likely to achieve its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. It also aims to draws lessons and develop recommendations for UNIDO, the governments, donors, the stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

A key component of the evaluation is to collect data using documents, interviews, focus groups and surveys. Data collection will be done at the regional and country levels.

You have been selected to participate in the Key Informant Interviews. You are asked to be open and frank in responding to all of our questions as the information you provide will form a key part of the findings and recommendations. We want to stress that your participation in this interview is completely voluntary and that your acceptance or refusal to participate will not affect your relationship with UNIDO or other organizations implemented the project. The information you will provide is for the purposes of the evaluation only.

The evaluation is being administered in accordance with all international and national privacy laws, policies and provisions. Your specific interview responses will not be attributed to you in any evaluation report resulting from this study.

Identification

Name of organization:	
Location of organization:	
Position of interviewee:	
Date of Interview (y/m/d):	
Time of Interview (from h/m - to h/m):	

Part 1: General

1. What has been your involvement with the Strengthening the local production of essential medicines in developing countries through advisory and capacity-

building support (Phases 4-6) project? Which parts of the project were you involved?

Part 2: Relevance

2. To what extent is the project aligned with the development priorities of the country (national poverty reduction strategy, sector development strategy)?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

3. What are the key drivers and barriers to achieve the long-term objectives?

4. Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have they been revised? Are the revised objectives still valid in today's context?

5. Is the project a technically adequate solution to the development problem? Does it eliminate the cause of the problem?

Part 3: Effectiveness

6. What are the main results (mainly outputs and outcomes) of the project? How do the stakeholders perceive them?

7. To what extent did the project achieve their objectives (outputs and outcomes), against the original/revised target(s)?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

8. What are the reasons for the achievement/non-achievement of the project objectives?

9. Were the right target groups reached?

10. What can be done to make the project more effective?

11. What is the quality of the results? How do the stakeholders perceive them? What is the feedback of the beneficiaries and the stakeholders on the project effectiveness?

Part 4: Efficiency

12. How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

13. How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

14. Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements?

15. Could the same have been achieved with less input?

16. How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 5: Sustainability

17. Will the project results and benefits be sustained after the end of donor funding?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

18. Does the project have an exit strategy?

Yes		❒

No		❒

Don't know	❒

19. Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?

20. What is the likelihood of financial and economic resources not being available once the project ends?

21. Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits?

Part 6: Gender Mainstreaming

22. Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

23. How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?

Part 7: Environmental and socioeconomical results

24. What are the main environmental results of the project at the national and regional levels?

25. What are the main socioeconomical results of the project at the national and regional levels?

Part 8: Impact

26. What are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and to what extent do conditions for trajectory change are being put into place?

27. What difference has the project made to the beneficiaries?

28. To what extent the project's initiatives and results are implemented at larger geographical scale?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

29. What is the change attributable to the project? To what extent?

Part 9: Social inclusiveness

30. To what extent the project contributes to changes in capacity and capability of individuals, groups and entities in society, such as employment, education, and training?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

31. Is the expected result-chain (impact, outcomes and outputs) clear and logical? Does impact describe a desired long-term benefit to a society or community?

Part 10: Project management

32. Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

33. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.

34. To what extent the national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions)?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

35. The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?

36. Has the project implemented outreach and public awareness campaigns? Outreach and public awareness materials produced are in line with the relevant UNIDO and donor advocacy guidelines?"

Part 11: UNIDO's role

37. Were adequate technical expertise mobilized for the project design and the implementation?

38. What is the inclusiveness of project design (with national counterparts)?

39. To what extent timely recruitment of project staff takes place?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 11: National counterparts

40. What is the ownership of the project?

41. Does the exit strategy, planned together with UNIDO, or arrangements for continued funding of certain activities?

42. To what extent the engagement with UNIDO in policy dialogue promote the up-scaling or replication of innovations?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 12: Donor

43. To what extent is there support by the donor's country presence (if applicable) supporting the project for example through engagement in policy dialogue?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 13: Other

Is there anything you would like to add to your interview responses?

Annex 5/3/5

Group 5 Questionnaire for Universities/Trainers

Presentation of the Evaluation

The independent Terminal evaluation of the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) Project ID: 120117, 130209, 140292, 160202 has been commissioned by UNIDO Independent Evaluation Division while two independent experts specialized in program/project evaluation has been contracted to conduct the evaluation.

The overall purpose of the evaluation is to assess whether the project has achieved or is likely to achieve its main objectives, and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. It also aims to draws lessons and develop recommendations for UNIDO, the governments, donors, the stakeholders and project partners that may improve the selection, enhance the design and implementation of similar future projects and activities in the target countries and on a global scale.

A key component of the evaluation is to collect data using documents, interviews, focus groups and surveys. Data collection will be done at the regional and country levels.

You have been selected to participate in the Key Informant Interviews. You are asked to be open and frank in responding to all of our questions as the information you provide will form a key part of the findings and recommendations. We want to stress that your participation in this interview is completely voluntary and that your acceptance or refusal to participate will not affect your relationship with UNIDO or other organizations implemented the project. The information you will provide is for the purposes of the evaluation only.

The evaluation is being administered in accordance with all international and national privacy laws, policies and provisions. Your specific interview responses will not be attributed to you in any evaluation report resulting from this study.

Identification

Name of organization:	
Location of organization:	
Position of interviewee:	
Date of Interview (y/m/d):	
Time of Interview (from h/m - to h/m):	

Part 1: General

1. What has been your involvement with the Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6) project? Which parts of the project were you involved?

Part 2: Relevance

2. Is the project a technically adequate solution to the development problem? Does it eliminate the cause of the problem?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

3. How does project reflect donor policies and priorities?

4. How does the project fulfil the urgent target group needs?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

5. To what extent does the project correspond to UNIDO's comparative advantages?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒

4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

6. Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have they been revised? Are the revised objectives still valid in today's context?

Part 3: Effectiveness

7. What are the main results (mainly outputs and outcomes) of the project? How do the stakeholders perceive them?

8. What are the reasons for the achievement/non-achievement of the project objectives?

9. To what extent is the identified progress result of the project rather than external factors?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

10. Were the right target groups reached?

11. How does the project fulfil the urgent target group needs?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒

4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 4: Efficiency

12. How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

13. How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.

14. Could more have been achieved with the same input?

15. Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements?

Part 5: Sustainability

16. Will the project results and benefits be sustained after the end of donor funding?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒

5 To a high extent	❒

Don't know	❒

17. Does the project have an exit strategy?

Yes		❒
No		❒

Don't know	❒

18. What is the likelihood of financial and economic resources not being available once the project ends?

1 Highly unlikely	❒
2 Unlikely	❒
3 Moderately unlikely	❒
4 Likely	❒
5 Highly likely	❒

Don't know	❒

19. Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits?

20. What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained?

21. Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?

Part 6: Gender Mainstreaming

22. 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)?

23. How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?

24. To what extent were socioeconomic benefits delivered by the project at the national and local levels, including consideration of gender dimensions?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 7: Environmental and socioeconomical results

25. What are the main environmental results of the project at the national and regional levels?

26. What are the main socioeconomical results of the project at the national and regional levels?

Part 8: Impact

27. What are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and to what extent do conditions for trajectory change are being put into place?

28. What difference has the project made to the beneficiaries?

29. To what extent the project contributes to changes in the economic performance (e.g. finances, income, costs saving, expenditure) of individuals, groups and entities?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 9: Social inclusiveness

30. To what extent the project contributes to changes in capacity and capability of individuals, groups and entities in society, such as employment, education, and training?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

31. Are critical risks related to financial, social-political, institutional, environmental and implementation aspects identified with specific risk ratings? Are their mitigation measures identified? Where possible, are the mitigation measures included in project activities/outputs and monitored under the M&E plan?

Part 10: Project management

32. Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.

33. The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified

timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?

34. To what extent the national management and overall coordination mechanisms have been efficient and effective?

1 Not at all	❒
2 To a fair extent	❒
3 To a moderate extent	❒
4 To a great extent	❒
5 To a high extent	❒

Don't know	❒

Part 10: Monitoring &Evaluation

35. How was the information from M&E system used during the project implementation? Was an M&E system in place and did it facilitate timely tracking of progress toward project results by collecting information on selected indicators continually throughout the project implementation period? Did project team and manager make decisions and corrective actions based on analysis from M&E system and based on results achieved?

36. Was the information provided by the M&E system used to improve performance and adapt to changing needs? Was information on project performance and results achievement being presented to the Project Steering Committee to make decisions and corrective actions? Do the Project team and managers and PSC regularly ask for performance and results information?

Part 11: UNIDO's role

37. Were adequate technical expertise mobilized for the project design and the implementation? What is the inclusiveness of project design (with national counterparts)?
38. Are previous evaluative evidence shaping project design?

39. To what extent timely recruitment of project staff takes place?

40. To what extent the project modified following changes in context or after the Mid-Term Review?

Part 11: National counterparts

41. What is the ownership of the project?

42. What is the support to the project (based on actions and policies)?

Part 12: Donor

43. Does overarching assessment of the project, drawing upon the analysis made under Project Performance and Progress to Impact criteria above but not an average of ratings?

44. Is there timely disbursement of project funds?

Yes	❒
No	❒

Don't know	❒

Part 13: Other

Is there anything you would like to add to your interview responses?

ANNEX 6: DELIVERED PROJECT RESULTS

Table 1. Delivery of project results (outputs and outcomes)

Components/ outputs /outcomes	Results targeted in the Logframe Phase 4	Results targeted in the Logframe Phase 5	Results targeted in the Logframe Phase 6	Results at project conclusion	Rating Exceeded Completed Incomplete	Risks to sustainability	Sustainability rating
Output 1 Local pharmaceutical production (LPP) strategies adopted.	• 5 sector master plan / national management plans prepared One strategy/implementation plan per country (Ghana, Kenya and one additional country) plus one strategy/ implementation plan at the continental level	• One strategy/ implementation plan per country and one in the PMPA context. In addition, activities according to the implementation plans initiated • (Ghana, Kenya, Zimbabwe)	• One strategy/ implementation plan per target geography. In addition, activities according to the implementation plan(s) initiated • (AU, ECOWAS, UR Tanzania)	• Country strategy documents were produced in 3 countries – Kenya, Zimbabwe and Ghana. - Kenya was adopted - Zimbabwe was not adopted yet - Ghana sector strategy was not adopted yet, and the revised GMP Roadmap strategy was adopted and is in use. • The ECOWAS GMP Roadmap Framework was validated	**Completed**	• Political changes resulting in change of government officials delays adoption of strategies • Few financing options for the industry hinder implementation of GMP requirements • Low incentives to manufacturers restrict upgrading of industries	Medium
Output 2 Tools (solution packages) to support the production of	• At least 4 reports / technical publications outlining the	• At least 1 technical publications outlining the tools exist and are	• Use of tools at the country level according to the country implementation	• 6 publications released and freely available for download on the internet.	**Completed**	• Lack of awareness about the existence of the publications	High

Components/ outputs /outcomes	Results targeted in the Logframe Phase 4	Results targeted in the Logframe Phase 5	Results targeted in the Logframe Phase 6	Results at project conclusion	Rating Exceeded Completed Incomplete	Risks to sustainability	Sustainability rating
quality essential medicines in an economically viable manner are developed	tools prepared/distributed.	distributed	plan • At least 1 technical publication outlining the tools exists and is distributed	• Successful piloting of the UNIDO GMP Roadmap in Kenya has led to its adoption and broad-based application by GIZ in the EAC region			
Output 3 Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered	• African regional Business Membership Organizations (BMO) and the continental African Federation (FAPMA) participate in relevant policy processes • # of end-users / beneficiaries trained by BMOs and Kilimanjaro School of	• # of membership organizations support./communities organized • Annual deficit between spending and operational revenue is constantly shrinking. • African regional Business Membership Organizations (BMO) participate in relevant policy processes KPI: # of end-users / beneficiaries	• # of end-users / beneficiaries trained Participants in training services offered by KSP, Tanzania	• At least 151 students supported to attend advanced training courses offered by the Kilimanjaro School of Pharmacy • IPAT pursued by 18 students • BIRS degree obtained by 21 students • Course contents judged relevant to needs, and training programme deemed recommendable by 100% of responsive course participants • Members of FAPMA - supported to attend	**Completed**	• Lack of institutionalized stuctures to support continued participation in training programmes and high-level events	Medium

Components/ outputs /outcomes	Results targeted in the Logframe Phase 4	Results targeted in the Logframe Phase 5	Results targeted in the Logframe Phase 6	Results at project conclusion	Rating Exceeded Completed Incomplete	Risks to sustainability	Sustainability rating
	Pharmacy, Tanzania	trained • Participants in training services offered by BMOs and Kilimanjaro School of Pharmacy, Tanzania		relevant high-level policy processes in African and International forums. FAPMA constitutes the first umbrella BMO representing pharmaceutical manufacturers in Africa • Support provided to SAGMA, which is recognized as the representative of the private sector in SADC			
Output 4 Information exchange on and awareness of LPP is enhanced	Reports / technical publications prepared/distributed • At least 3 reports / technical publications/ articles prepared and distributed • At least 2 partnership	Reports / technical publications prepared/distributed • At least 1 reports / technical publications/ articles prepared and distributed Partnerships in	• At least 1 report / publication / article prepared and distributed • Partnerships in the PMPA context are maintained	• 6 publications released and available for download on the internet • 1 partnership agreement formed between UNIDO and WAHO to support the development of the pharmaceutical industry in the ECOWAS region • At least 9 conferences/ relevant	**Completed**	• Continued intervention by UNIDO in information exchange and awareness on LPP	High

Components/ outputs /outcomes	Results targeted in the Logframe Phase 4	Results targeted in the Logframe Phase 5	Results targeted in the Logframe Phase 6	Results at project conclusion	Rating Exceeded Completed Incomplete	Risks to sustainability	Sustainability rating
	agreements on the PMPA established • Participation in relevant events/ conferences as contributors • Articles in relevant publications	the PMPA context are maintained		events attended by UNIDO as contributors • At least 2 articles published in relevant publications			

Table 2: Summary of project outputs by component				
Components/outputs/outcomes	**Kenya**	**Ghana**	**Zimbabwe**	**AU**
<u>Output 1</u> Local pharmaceutical production (LPP) strategies adopted.	• The project produced the Kenya Pharmaceutical Sector Development Strategy (KPSDS) document released by UNIDO in 2013 • Training of several pharmaceutical industry stakeholders including: - 30 Senior operational staff for all manufacturers (30) on GMP (2013) - 18 staff of the Pharmacy and Poisons Board in 2014 • Advocacy on the adoption of LPP strategies - Sensitization of Ministry of Industrialization on the problems for pharmaceutical industry caused by the retroactive	• The Ghana GMP Roadmap 2015 was revised based on earlier assessments conducted in 2012 • The Ghana Pharmaceutical Sector Development strategy was completed in November 2018, pending launch • Training for various stakeholders - GMP training onsite and QMS related GMP aspects for 39 participants from Pharmaceutical Industry and Regulator • Technical support to the pharmaceutical industry and government - Joint UNCTAD / UNIDO mission, to gather information on policy coherence - Assistance provided to the Export Trade Agricultural and Industrial Development Fund (EDAIF) to structure its approach to the pharma sector in the current and future investment rounds in a way that more companies can benefit. - Investment funding	• The Sector Development Strategy for Pharmaceutical Manufacturing in Zimbabwe 2017-2022 produced although this was not launched • Advocacy support to the pharmaceutical industry - Statutory instrument (SI) promulgated to roll back duties and VAT on selected raw materials, and facilitated the modalities of implementation of the SI between the pharmaceutical industry and ZIMRA. - Facilitated workshops to streamline and expedite local product registrations - Facilitated the finalization of the import restriction list between the industry, Ministry of Health, and the	• The PMPA-BP pilot implementation was conducted in Ghana starting in 2013 • A working group of UNIDO, UNAIDS and WHO was confirmed by the AUC to advance the agenda of implementation of the PMPA-BP • Several high-level events and communications to advance the implementation of the PMPA-BP including: - A joint UNIDO/UNAIDS side event was held at the AUC/UNECA Ministers of Finance meeting in March 2014 in Abuja. Panelists included Mr Li, Mr Sidibe, Dr Mwencha and Dr Lopes (UNECA). - A joint Editorial by Dr Chan, Mr Sidibe and Mr Li in support of LPP and the PMPA BP was prepared for publication in the June 2014 WHO Bulletin. • Fundraising efforts including: - A meeting between the UNIDO DG and the Bill and Melinda Gates Foundation

Table 2: Summary of project outputs by component				
Components/outputs/outcomes	**Kenya**	**Ghana**	**Zimbabwe**	**AU**
	introduction of VAT on pharmaceutical starting materials. - Facilitation of a Meeting of the Permanent Secretaries from MOIED and MOH with Kenyan Federation in April 2014	applications made by two companies to EDAIF reviewed by expert (2 additional applications to be reviewed under follow on project). - Market data-gathering approach developed to capture the level of pharmaceutical imports into Ghana. - Industry surveyed on incentives that would have maximum beneficial impact on competitiveness - Software design change requirements for the software that is used to connect data from the FDA and the Revenue Authority of Ghana were written up and communicated to Ghana Customs Net	Ministry of Trade and Industry - Developed a package of incentives to benefit the industry in the Special Economic Zone that is proposed for the industry - Conducted an assessment of the local pharmaceutical industry in Zimbabwe and identified the proportions of drugs imported, donated and produced locally in 2014 - Identified the top medicines consumed by quantity and value in the local market.	Co-chair in Beijing in 2015 - Submission of a joint proposal with GIZ to DfID on WHO GMP Roadmap for the EAC in 2015 • ECOWAS Regional Workshop held in Dakar in 2017, attended by more than 50 stakeholders from all ECOWAS Member States • The ECOWAS GMP Roadmap Framework was validated in 2018 in Abidjan, Cote d'Ivoire
<u>Output 2</u> Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed	• UNIDO developed the concept and published a White Paper on the GMP Roadmap Concept, which is a 2 stage plus interim milestone concept that industries can employ to attain acceptable GMP standards; which was accepted by WHO • The Chapter "Finance and incentives to support the development of national pharmaceutical industries" was co-authored with G. Banda in the book "Making medicines in Africa" This book is available for download from the Internet • The document "Boosting Pharmaceutical Production" was released in 2019 and is available for download from the Internet • The document "Pharmaceutical Industry in Sub-Saharan Africa: A Guide for Promoting Pharmaceutical Production in Africa", which is available for download from the Internet • White paper Establishing Manufacturing Capabilities for Human Vaccines [2017] produced and available for download on			

Table 2: Summary of project outputs by component				
Components/outputs/outcomes	**Kenya**	**Ghana**	**Zimbabwe**	**AU**
	the UNIDO website • White paper on Commercializing Vaccines - A methodology to identify potential market opportunities and conduct outline assessments [2018] produced and available for download on the UNIDO website			
Output 3 Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered	• Support to FAPMA including o Sponsorship of members to attend key international events o Facilitation of FAPMA meetings and AGM • Provision of catalytic inputs for the early South African General Medicines Association (SAGMA) work plan areas including: o Financing staff to support the Board o Sponsorship of the SAGMA Conference in 2013 o Inalization of Training Needs Analysis in 2013 o Preparation of country workshops Botswana, Lesotho, Malawi and Zambia to increase membership in these countries • Sponsorship of students to advanced training courses (Female participants are ~41-42% per cohort o Industrial Pharmacy Advanced Training Course (IPAT) 24 students in 2014, 44 students in 2015, 18 students in 2017 o Masters course in Biotechnology, Innovation and Regulatory Science (BIRS) – 44 students in 2014, 21 students in 2017			
Output 4 Information exchange on and awareness of LPP is enhanced	• UNIDO has participated in several high-level meetings and conferences relevant to pharmaceutical manufacturing in Africa including: o AU Heads of State Summit (closed session), Addis Ababa, in 2013 o AU Abuja Summit of 2013 o Strategy Workshops on 'Local production, TRIPS and public health', GIZ/BMZ, Geneva in 2013 o WAHO meeting on local pharmaceutical production, Bobo Dioulasso in 2013 o Parliamentary Roundtable on building partnerships and strengthening advocacy and oversight strategies on AU Policy Frameworks, Midrand, South Africa in 2014 o Joint UNECA/AUC Meeting of Ministers of Finance and Economy, Abuja in 2014 o Launch of the national strategy and plan of action for pharmaceutical manufacturing development (2015-2025) in Ethiopia			

Table 2: Summary of project outputs by component				
Components/outputs/outcomes	**Kenya**	**Ghana**	**Zimbabwe**	**AU**
	○ Technical Review Committee of the SADC Local Manufacturing Feasibility study in Gaborone ○ SADC/EU Consultative Workshop on the Industrialization Program under the 11th European Development Fund (EDF 11), Midrand 2017 • UNIDO has published articles in relevant publications including: ○ Article on 'Local Production of Generic Medicines in Africa' on website capacity4dev.eu2. ○ Editorial in June 2014 WHO Bulletin titled "Commodities for better health in Africa-time to invest locally" by Michel Sidibé, Li Yong & Margaret Chan: • In seeking partnership agreements on the PMPA-BP ○ Contributed to the various ECOWAS efforts to structure the development of GMP roadmaps in the region ○ Identified African companies to participate in the Buyers-Sellers Meeting in the Pharmaceutical Industry and related industries organized by the Arab Trade Financing Progrma in Oman, Jordan in 2015 ○ Supported preparations of visit of Chinese Investment Delegation to Ethiopia and Kenya in 2015 • Attended the Interagency Pharmaceutical Coordination Group (IPC) in Copenhagen in 2013 and 2015 • UNIDO and WAHO in 2018 signed a Joint Declaration to develop a regional Good Manufacturing Practice Roadmap and national initiatives to upgrade the pharmaceutical industry in the ECOWAS region In 2019, UNIDO, together with WHO, UNCTAD, UNAIDS, UNICEF and the Global Fund released a joint Interagency Statement pledging to work in a collaborative, strategic and holistic manner in partnership with governments and other relevant stakeholders to strengthen local production in Africa			

Table 3: Summary of project outcomes and impact by component				
Components/outputs/outcomes	**Kenya**	**Ghana**	**Zimbabwe**	**AU**
<u>Output 1</u> Local pharmaceutical production (LPP) strategies adopted.	• Increased political will and dialogue towards improved pharmaceutical manufacturing by the GoK by MOIED, MOH and PPB • Improved engagement between the pharmaceutical manufacturers and the Pharmacy	• Improved collaboration between the regulator, pharmaceutical industry, Ministry of Trade and Industry and the National Planning	• Improved knowledge of the status of the pharmaceutical industry by relevant stakeholders e.g. local produced drugs had a market share of only 10%, which is lower than	• UNIDO and WAHO in 2019 signed a Relationship Agreement to support the development of the pharmaceutical industry in the ECOWAS region and to implement the regional

Table 3: Summary of project outcomes and impact by component				
	and Poison's Board • The governance structure for the implementation of the KPSDS was set up and includes the Pharmaceutical Technical Committee (PTC) and the Pharmaceutical Steering Committee (PSC). • Increased capacity of the PPB to conduct GMP inspections – technical skills are improved, and budgetary allocation has been made to conduct inspections. Ability of regulatory staff to use and monitor CAPA implementation plans improved.	Development Commission • Increased awareness of pharmaceutical investment needs to achieve WHO GMP certification • 28 GMP gap assessments performed • Regular training provided-on the job training of inspectors through conduct of joint assessments.	what the government had assumed it was; and knowledge of the amount of investment needed to improve local production quality. • Increased political will to promote local production • Improved incentives for the local industry due to restricted importation of 22 additional pharmaceutical products • Improved collaboration between the industry and the regulator	pharmaceutical upgrading framework that has been developed. This comprehensive programme aims at engaging WAHO Member States and other partners and mobilizes resources.
Output 2 Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed	• Develop training modules on pharmaceutical company upgrading • Training modules are ready to be used in focus countries.			
Output 3 Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered	• Built capacity of BMOs at regional and continental level; • Enhanced capacity of training institutions • Advocacy programme ratified by the board of various working groups; high level of visibility for SAGMA maintained at relevant fora; • Ingram joined SAGMA; • FAPMA duly registered and website launched; GFATM to pursue the procurement of products targeting opportunistic infections from 20 African based pharmaceutical manufacturers • 45 students graduated (22- BIRS and 23 IPAT); • Share of female participants more than doubled since beginning of UNIDO support.			

Table 3: Summary of project outcomes and impact by component				
Output 4 Information exchange on and awareness of LPP is enhanced	Information exchange on and awareness of LPP is enhanced	Significant interest expressed informally by a number of agencies at the meeting		Increased recognition and engagement of UNIDO as a major player in promotion of Local Pharmaceutical Production in Africa, as evidenced by UNIDO being selected to lead the work on developing the GMP roadmap framework for the ECOWAS region.

Table 4: Extent and forms of adoption of changes leading to Local Production of Pharmaceuticals in Africa				
Components/ outputs/outcomes	**What has been mainstreamed and how?**	**What has been replicated, by whom and to what extent?**	**What has been scaled and how?**	**Comment**
Output 1 Local pharmaceutical production (LPP) strategies adopted.	• Kenya Pharmaceutical Sector Strategy was adopted by the Ministry of Industry, Trade and Cooperatives and the Ministry of Health as the policy guidance document • The Ghana Pharmaceutical Sector strategy had begun the process towards its launch where it will be housed in the Ministry of Industry and Trade as the strategy document for the sector. • The PMPA BP was adopted by the AU and is recognized as the Africa Region policy framework from which the regional strategies are derived.	The pilot GMP Road Map for Kenya was used as the basis for development of GMP roadmaps across Africa by GIZ in the EAC and by UNIDO/WAHO in ECOWAS	No evidence of scaling	

Table 4: Extent and forms of adoption of changes leading to Local Production of Pharmaceuticals in Africa				
Output 2 Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed	• The Kenya GMP Roadmap has been adopted and is used by the regulator as the basis for industry supervision • The Ghana GMP roadmap is being used by the regulator as the basis for industry supervision	The pilot GMP Road Map for Kenya was used as the basis for development of GMP roadmaps across Africa including by GIZ in the EAC and by UNIDO/WAHO in ECOWAS	No evidence of scaling	
Output 3 Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered	No evidence of mainstreaming accessed	No evidence of replication accessed	No evidence of scaling	
Output 4 Information exchange on and awareness of LPP is enhanced	No evidence of mainstreaming accessed	No evidence of replication accessed	No evidence of scaling	

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**
<u>Output 1</u> Local pharmaceutical production (LPP) strategies adopted	• Agreed/required strategies/changes in legislation and regulatory stipulations pass requisite procedures	This is true for Kenya where the strategy has been adopted and Ghana where the strategy is in the process of being adopted. In Zimbabwe, the strategy has not been adopted and at time of the evaluation was not in process to being adopted	UNIDO engaged all relevant stakeholders in the strategy development process including the ministries of trade and health, the industry associations, and the regulator. This enabled collaboration between the various government agencies.	National policy in most countries was highly aligned to the development of a pharmaceutical sector strategy at the time of this Project. However, this process was being hindered by lack of capacity and an agency to take leadership for the process.	
	• Willingness of governments/donors to finance and implement programs that enable the pharmaceutical industry to develop and use regional market opportunities.	Most governments have expressed willingness to enact policy to support the development of the pharmaceutical industry. Most governments are willing to finance the regulation of the pharmaceutical industry, but not the investment into the industries. This is	UNIDO work on this Project was at country level and at Africa regional level. This ensured harmonization between all strategies and the PMPA BP This Project also addressed the financial requirements to	The willingness of the governments to finance and implement programs appears to be influenced by the political and socio-economic situation of the country.	

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**
		left to the manufacturers. Most governments in Africa are promoting the use of regional market opportunities, however there are still gaps in harmonization of standards related to pharmaceutical regulation in the EAC.	develop the pharmaceutical industry, which provided a benchmark for resource mobilization at country level to develop the industry.		
	• The high-level interest in countries is maintained and translates into commitment from stakeholders at the operational level.	In the target countries, there was high level interest from stakeholders at operational level, especially the regulators.	Engagement of all relevant stakeholders throughout the Project maintained the levels of interest. The Project was very relevant to the stakeholders' priorities	The Project was highly aligned to the national and health sector priorities.	
	• Government departments are willing and able to work across departments	All government departments contributed to and collaborated in the development of the	The Project attained buy-in from the relevant government departments and	-	

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**
		strategy	facilitated collaborative engagement		
<u>Output 2</u> Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed	• Tools/solution packages are accepted by respective policy makers and can be integrated into draft strategies	The GMP Roadmap concept was accepted by policy makers in the target countries and integrated into the draft strategies	UNIDO pilot tested the GMP Road Map Concept in Kenya, and this was used as the point of departure for other country GMP Roadmaps	-	
	• Solutions can be translated into policies and relevant government departments agree on common approach.	There was evidence of solutions being translated into policies mostly regarding strategies to protect the local industry from foreign competition. However, in target countries, there were challenges in translating the solutions into policies that encourage GMP	UNIDO facilitated forums to increase awareness of government agencies on the impact of the policy on the industry e.g. the introduction of VAT for pharmaceutical materials. UNIDO activities for this Project increased	There is precedence of governments enacting policy to support the development of an industry sector	

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**
		compliance.	engagement between the industry and government, through which government awareness of the impact of policy on industry was increased.		
<u>Output 3</u> Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered	• Institutions are able to represent the private sector (in terms of composition and membership)	FAPMA, the first umbrella BMO representing pharmaceutical manufacturers in Africa is constituted of the Federation of East African Pharmaceutical Manufacturers; SAGMA, and the West African Pharmaceutical Manufacturers Associaton	UNIDO supported SAGMA at FAPMA to improve their operations and ensure participation in international dialogue on LPP. These are business member organizations representing the pharmaceutical manufacturers	-	

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**
	• SADC policies related to LPP progress so that SAGMA has a field of operations (regional regulatory harmonization)	Current SADC policy related to LPP is the SADC Pharmaceutical Business Plan 2015-2019	-	-	
	• Trainers are in good health and able to travel to Tanzania				
	• Employers stick to agreement and release participants for training, participants can fund accommodation/travel costs.	Employers were willing to release participants for training. Private sector participants faced challenges in cost-sharing for the training	The training programs supported by UNIDO are highly relevant to the industry.	There are no other specialist training programs for Industrial pharmacists in the EAC region.	

Table 5: Extent to which pre-conditions for the promotion of local pharmaceutical production in Africa have been reached					
Components/ outputs/outcomes	**Pre-condition**	**Extent to which precondition is in place**	**Project contributions to preconditions and the significance of the project contributions**	**Other factors, projects, actors or events that contributed to the observed preconditions**	**Important issues that remain to be addressed for the promotion of local pharmaceutical production in Africa**
<u>Output 4</u> Information exchange on and awareness of LPP is enhanced	• Sufficient interest in development of the pharmaceutical sector is sustained by the international community and funding becomes available for broader implementation	There is very low interest internationally in the development of the pharmaceutical sector in Africa. In all target countries, UNIDO was the only international partner currently engaged in this.	UNIDO participated in several high-level international fora and highlighted the importance of promotion of local pharmaceutical production		
	• Other stakeholders are receptive to findings, and vested interests do not block impartial assessment of findings.				
	• Individuals within partner organisations do not derail potential agreements and working relationships on the basis of dogmatic perspectives.				

ANNEX 7: TERMS OF REFERENCE

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent terminal evaluation

UNIDO Global Project

Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6)

UNIDO Project ID: 120117, 130209, 140292, 160202

AUGUST 2018

Contents

I. Project background and overview

1. Project factsheet

Project title	Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6)
UNIDO project ID	120117, 130209, 140292, 160202
Project sites	EAC (focus: Kenya), ECOWAS (focus: Ghana), Ethiopia (focus: AUC HQ), Myanmar, Viet Nam, Zimbabwe
Planned implementation start date	November 2012
Planned implementation end date	June 2018
Actual implementation start date	
Actual implementation end date	December 2018
Implementing agency(ies)	UNIDO
Executing partner(s)/entity(ies)	
Donor(s):	BMZ, GIZ, OPF, WAHO
Total project allotment	€ 7,717,316 USD 2,022,870
Total co-financing at design (in cash and in-kind)	Cash: € 140,000 In-kind:
Materialized co-financing at project completion (in cash and in -kind)	Cash: € 99,280 In-kind:
Previous review dates (project phases 1-3)	November 2009 – January 2010 and December 2012 – May 2013

(Source: Project documents)[8]

2. Project context

Unsatisfactory access to quality essential medicines is a key limitation that continues to impact on the health of the populations in developing and least developed countries (DCs/LDCs). The issues linked to the access-to-drugs challenge are multitude and complex, and include weak healthcare systems, drastic shortages of healthcare professionals, inefficient distribution channels, limited funding for products, intellectual property restrictions and many more. A further problem is ensuring the quality of medicines that are available in the market.

This project contributes to addressing the access problem in target geographies by improving the conditions for the local production of safe, efficacious and quality assured essential medicines supplied at affordable prices.

[8] Project information data throughout these TOR are to be verified during the inception phase.

The industry faces a bundle of constraints affecting the operating environment at various interconnected levels. By overcoming these limitations, locally produced medicines (currently at approx. 30% of the market volume in sub-Saharan Africa (SSA)) offer a potential for increased medicine supply and could contribute to both health and economic goals.

Starting in 2006, UNIDO has been running six phases of a global project on strengthening the local manufacture of essential generic medicines. The initial focus of intervention was placed on the local production of drugs against the three pandemic diseases (HIV/AIDS, Malaria, TB) in LDCs, taking advantage of the TRIPS Agreement's exemption on LDCs meanwhile extended to 2033. The second phase of the project saw a broadening towards developing countries at large and also recognized that sustainable local pharmaceutical manufacturing capacity would require consideration of the range of products and indications beyond the three pandemic diseases. Phase 3 and 4 pursued the continuation and deepening of interventions in existing project countries, and were to a large extent determined by UNIDO's entering into a partnership with the African Union Commission (AUC) in July 2011. This partnership culminated in the joint preparation and formal adoption at highest AU policy-making levels (AU Conference of Ministers of Health and AU Heads of State Summit) of a "Business Plan" (BP) for the accelerated implementation of the 2007 AU Pharmaceutical Manufacturing Plan for Africa (PMPA) in May and July 2012, respectively. UNIDO supported the first steps towards implementation of the PMPA BP as the lead partner of the AUC. Additional pledges by Germany to allocate (parts of) her unutilised balances of 2010/11 and 2012/13 to UNIDO's LPP project(s) have provided the opportunity to supplement as well as thematically and geographically expand subject interventions as of Phase 4. Building on previous achievements, Phase 5 including an extension and expansion allowed UNIDO to continue to play a lead role in the operationalization of the PMPA BP in addition to broadening the scope of work at national and sub-regional levels. Finally, Phase 6 focussed on the consolidation and/or upscaling of selected interventions prioritized on the basis of their prospects for having a sustainable positive impact on pharmaceutical sector development beyond the project duration.

Independent reviews/evaluations of project phases 1-3 were carried out from November 2009 to January 2010 and between December 2012 and May 2013, respectively.

3. Project objective

The key objective of the project is to increase the capacity for the local production of safe, efficacious and quality assured essential medicines at affordable prices in target developing countries as a means to augment the availability of such products.

To achieve this objective, an essential prerequisite at the outcome level is that relevant stakeholders (government, pharmaceutical sector support organizations/institutions and companies) fulfil their mutually agreed roles in the implementation of pharmaceutical sector support strategies, using the acquired skills, structural changes, enhanced knowledge and capacity imparted by the project.

The following **project components** have been developed, in addition to project management, to achieve the project objectives:

Project Component 1: Formulation, agreement and/or support for implementation of pharmaceutical sector development strategies;
Project Component 2: Development and application of tools (solution packages) to support the commercially viable production of quality essential medicines;
Project Component 3: Capacity-building at sector specific support institutions regarding advocacy functions performed and services offered;
Project Component 4: Promoting information exchange on, and awareness of LPP.

Direct target beneficiaries are those stakeholders whose action (or inaction) impacts on the operating environment of pharmaceutical manufacturers in target geographies, i.e. policy-makers, medicine regulators, training providers, pharmaceutical industry associations, etc.

Through benefiting from an improved operational environment, pharmaceutical manufacturers in the target countries are the project's indirect target beneficiaries as is the population at large who can draw on quality medicines produced locally and enjoy the positive economic effects of industrial development.

4. Present stage of project implementation

Project ID	Runtime (From – To)	Resources available		Resources utilised (Jul 2018)	
		EUR	USD	EUR	USD
120117	11/2012 – 12/2018	4.76m	0.17m	4.17m	0.16m
130209	01/2014 – 06/2016	0.7m		0.7m	
140292	01/2015 – 03/2018	1.91m		1.89m	
160202	01/2017 – 03/2019	0.35m	1.86	0.2m	1.31m
Total		7.72m	2.03m	6.96m	1.47m

II. Scope and purpose of the evaluation

The terminal evaluation (TE) will cover phases 4 through 6 of the project up to the date of the evaluation. It will assess project performance against the evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact.

The TE has an additional purpose of drawing lessons and developing recommendations for UNIDO, the Government, Donors, and the project stakeholders and partners that may help improving the selection, enhancing the design and implementation of similar future projects and activities in the countries and on a global scale upon project completion.

The TE should provide an analysis of the attainment of the project objective and the corresponding outputs and outcomes. Through its assessments, the Evaluation Team (ET) should enable the Government, counterparts, UNIDO and other stakeholders and donors to verify prospects for development impact and sustainability, providing an analysis of the attainment of project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators. The assessment shall include a re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in section III below.

The overall purpose of the TE is to assess whether the project has achieved or is likely to achieve its main objective as stated under section I.3 above and to what extent the project has also considered sustainability and scaling-up factors for increasing contribution to sustainable results and further impact. The degree to which the recommendations of the previous evaluations have been accounted for shall also be reviewed. UNIDO is currently developing a programmatic approach which would integrate the organization's key LPP services in a coordinated fashion leveraged through systematic knowledge management as a basis for strategic planning, monitoring & reporting, communications & advocacy, and learning. It is expected that the findings of the evaluation provide insights which would be readily applicable for refining the envisaged programme design and set-up as well as its underlying Theory of Change to achieve transformational impact.

The evaluation has three specific objectives:

- Determine the extent to which the expected results as defined in the project documents or other documents reflecting project revisions have been met or to assess the likelihood of achieving these upon project completion; the degree to which recommendations of the last evaluation have been included in project design and work;
- Identify strengths and weaknesses of the project implementation, design (including log frame) and management so far, including project monitoring and self-evaluation (M&E) mechanisms, and elucidate key reasons for implementation delays;
- Identify potential options for improvement, which could include modifications of the design, including the logical framework, implementation and management mechanism (steering committee; responsibilities of UNIDO and project staff, scheduling, etc.).

III. Evaluation approach and methodology

The TE will be conducted in accordance with the UNIDO Evaluation Policy[9], UNEG Norms and Standards for evaluation and the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle[10].

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 on the conduct of the evaluation and methodological issues.

In line with its objectives, the evaluation will have two main components. The first component focuses on an overall **assessment of performance** of the project, whereas the second one focuses on the **learning** from the successful and unsuccessful practices in project design and implementation. 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 future projects so that the management team can effectively manage them based on results. In those cases where baseline information for relevant indicators is not available, the evaluation team will aim at establishing a proxy-baseline through recall and secondary information.

1. Data collection methods

The ET will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources, as necessary: desk studies and literature review, individual interviews, focus group meetings/discussions, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings. The specific mixed methodological approach will be described in the inception report.

Following are the main instruments for data collection:

(a) **Desk and literature review** of documents related to the project, including but not limited to:

[9] UNIDO. (2018). Director General's Bulletin: Evaluation Policy (DGB/2018/08, dated 1 June 2018)

[10] 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)

- The original project documents, 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 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 and counterparts

(c) **Field visits** (tentative) to Burkina Faso, Ethiopia, Ghana, Kenya, Tanzania, and Zimbabwe
- On-site observation of results achieved by the project, including interviews of actual and potential beneficiaries
- Interviews with the relevant UNIDO Country Office(s) representative to the extent that he/she was involved in the project, and the project's management members and the various national [and sub-regional] authorities dealing with project activities as necessary

(d) Other interviews, surveys or document reviews as deemed necessary by the evaluation team and/or by the Independent Evaluation Division for triangulation purposes

2. Evaluation key questions and criteria

The evaluation team will develop interview guidelines. Field interviews can take place either in the form of focus-group discussions or one-to-one consultations.

The key evaluation questions are the following:

(a) 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?

(b) How well has the project performed? Has the project done the right things? Has the project done things right, with good value for money?

(c) 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 will the achieved results sustain after the completion of the project?

(d) What lessons can be drawn from the successful and unsuccessful practices in project design, implementation and management?

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, institutional and environmental risks) and explain how these risks may affect the continuation of results after the project ends. Table 1 below provides the key evaluation criteria to be assessed by the evaluation. The detailed questions to assess each evaluation criterion are in annex 2. The **rating criteria** and table to be used is presented in Annex 7.

Table 1: Summary of Project evaluation criteria

Index	Evaluation criteria	Mandatory rating
A	**Progress to 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	• Environment and socio-economic aspects	
2	• M&E: (focus on Monitoring) ✓ 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

IV. Evaluation process

The evaluation will be implemented in phases which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

- UNIDO Independent Evaluation Division (IED) identifies and selects the Evaluation Team members, in consultation with project manager.
- Inception phase

- ✓ Desk review and data analysis: The evaluation team will review project-related documentation and literature and carry out a data analysis.
- ✓ Briefing of consultant(s) at UNIDO Headquarters (HQ)
- ✓ Preparation of inception report: 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 project progress reports or mid-term reviews.
- ✓ Interviews, survey

- Field phase
  - ✓ Country field visits
  - ✓ ET debriefing in the field to project stakeholders
- Reporting phase
  - ✓ After field mission, HQ debriefing with preliminary findings, conclusions and recommendations by the ET leader
  - ✓ Data analysis and draft report writing
  - ✓ Draft report submission
  - ✓ Sharing and factual validation of draft report with stakeholders
  - ✓ Final evaluation report submission and QA/clearance by IED, and
  - ✓ Two pages summary take-away message
- IED Final report issuance and distribution with the respective management response sheet and further follow-up, and publication of evaluation report in UNIDO intra/internet sites

V. Evaluation team composition

A staff from the UNIDO Independent Evaluation Division will be assigned as Evaluation Manager and will coordinate and provide evaluation backstopping to the evaluation team and ensure the quality of the evaluation. The UNIDO Project Manager will act as resource person and provide support to the evaluation team and the IED evaluation manager.

The evaluation team will be composed of one international evaluation consultant acting as the team leader and one regional consultant. The evaluation team members will possess relevant strong experience and skills on evaluation and evaluation management. Expertise and experience in the related technical subject of the project is highly desirable. The evaluation consultants will be contracted by UNIDO.

The tasks of each team member are specified in the job descriptions in annex 3 to these terms of reference.

According to UNIDO Evaluation Policy, members of the evaluation team must not have been directly involved in the design and/or implementation of the project under evaluation.

VI. Time schedule

The evaluation is scheduled to take place from October to December 2018.

The inception report containing work plan, key findings of desk review, methodology, sampling technique, evaluation tools such as questionnaires and interview guidelines is expected to be delivered by mid-October.

The evaluation field mission (briefing of evaluators in the field, possible testing of evaluation tools, field visits, field research, interviews, observation, questionnaires, etc.) is tentatively planned for October/November.

The draft evaluation report will be submitted 2 to 4 weeks after the end of the mission.

The Final Evaluation report will be submitted 2 weeks after comments received.

VII. Evaluation deliverables

Inception report

This Terms of Reference (ToR) provides some information on the evaluation methodology, but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the International Evaluation Consultant will prepare a short inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type of and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO Evaluation Manager.

The Inception Report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework ("evaluation matrix"); mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable[11].

Evaluation report and review procedures

The draft report will be delivered to UNIDO 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 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 comments received, the evaluation team will prepare the final version of the terminal evaluation report.

[11] The evaluator will be provided with a Guide on how to prepare an evaluation inception report and a Guide on how to formulate lessons learned (including quality checklist) prepared by the UNIDO Independent Evaluation Division.

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. The ET should submit the final version of the TE report in accordance with UNIDO Independent Evaluation Division standards.

VIII. Quality assurance

All UNIDO evaluations are subject to quality assessments by the 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).

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. UNIDO's 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 issue and circulate it within UNIDO together with a management response sheet, as well as submit to relevant stakeholders as required.

Annex 1: Project results framework

Annex 1a: ID 120117

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
▫ **IMPACT/** **DEVELOPMENT OBJECTIVE:** ▫ Increase the capacity of local production of essential medicines to supply safe, efficacious and affordable medicines.	• # of enterprises continuously progressing towards international GMP standards (number of companies will depend on the countries ultimately included in the project as the sectors vary in size significantly)	• National regulatory authorities • WHO	▫
OUTCOME(S)/ **IMMEDIATE OBJECTIVE:**			
▫ Pharmaceutical industry development strategies (in Ghana, Kenya, Viet Nam, and at least one additional country as well as at the continental level) are implemented by the relevant stakeholders (government, pharmaceutical sector support organizations/institutions and companies), using the acquired skills, structural changes, enhanced knowledge and capacity imparted by the project. ▫ (The holistic sector development approach advocated by the project implies the capture of a large number of dimensions in each individual pharmaceutical industry	• KPI: # of enterprises effected by policy Relevant laws/regulations/polices promulgated in supporting local production of essential medicines in line with and defined by the sector development strategy	• Publications of law/ regulation/ policy amendments	• Manufacturers make active use of the improved framework conditions and expand their businesses to produce GMP standard medicines • Political will in target countries to invest in infrastructure for the enforcement of quality standards • India and China see threat to their African markets and increase export subsidies (Risk) • Markets (including donor markets) are stable and funds available to purchase medicines not adversely affected by the financial crisis.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
development strategy. Typically, these include ensuring policy coherence, [medicines] regulatory capacity-building, HR development/training, GMP Roadmap, access to finance, [time-limited] industry incentives.)			• Macro-economic factors (e.g. exchange rates, interest rates etc.) do not compromise economic viability.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
OUTPUTS:			
O.1 Pharmaceutical industry development strategies in target countries / at continental level are developed and agreed on by all relevant stakeholders and implementation mechanisms for holistic approach are set up	• KPI: # of sector master plan / national management plans prepared One strategy/implementation plan per country (Ghana, Kenya, Viet Nam, and one additional country) plus one strategy/ implementation plan at the continental level	• PMPA BP and implementation plan endorsement declaration by Heads of State, • Country strategy endorsement & country implementation plan endorsement declaration by MOTI&MOH	• Agreed/required strategies / changes in legislation and regulatory stipulations pass requisite procedures. • Willingness of governments/ donors to finance and implement programs that enable the pharmaceutical industry to develop and use regional market opportunities. • The high level interest in countries is maintained and translates into commitment from stakeholders at the operational level. Government departments are willing and able to work across departments.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
O.2 Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed	• KPI: # of reports / technical publications prepared/distributed At least 4 technical publications outlining the tools exist, are distributed and ready for use	• Publications disseminated	• Tools/solution packages are accepted by respective policy makers and can be integrated into draft strategies • Solutions can be translated into policies and relevant government departments agree on common approach.
O.3 Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered	• KPI: # of membership organizations support./communities organized African regional Business Membership Organizations (BMO) and the continental African federation (FAPMA) participate in relevant policy processes • KPI: # of end-users / beneficiaries trained • Participants in training services offered by BMOs and Kilimanjaro School of Pharmacy, Tanzania	• Invitations indicate that BMOs are accepted to represent the private sector at events/conferences • Members are benefitting from services offered (i.e. participate in trainings) • Training materials and participants list for IPAT	• Institutions are able to represent the private sector (in terms of composition and membership) • SADC policies related to LPP progress so that SAGMA has a field of operations (regional regulatory harmonization) • Trainers are in good health and able to travel to Tanzania • Employers stick to agreement and release participants for training, participants can fund accommodation/travel costs.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
O.4 Information exchange on and awareness of LPP is enhanced	• KPI: # of reports / technical publications prepared/distributed At least 3 reports / technical publications/ articles prepared and distributed At least 2 partnership agreements on the PMPA established Participation in relevant events/ conferences as contributors Articles in relevant publications	• Reports published by UNIDO • Partnership agreements for PMPA • BTOMR • Articles	• Sufficient interest in development of the pharmaceutical sector is sustained by the international community and funding becomes available for broader implementation • Other stakeholders are receptive to findings, and vested interests do not block impartial assessment of findings. • Individuals within partner organisations do not derail potential agreements and working relationships on the basis of dogmatic perspectives.
ACTIVITIES			
Activity Cluster A 1.1: Implement pharmaceutical industry development strategies in Ghana, Kenya and Viet Nam and agree on strategy in 2 additional countries in Africa			
A 1.1.1 Prepare implementation plans for the pharmaceutical sector development strategies in Ghana and Kenya (incl. support for the consolidation of relevant governance structures)	• Development of a detailed operational plan for Strategy implementation in Ghana and Kenya and start of implementation (embedded in an appropriate governance framework)	• Submission of the operational plan to MOTI in Ghana and Kenya • Meeting minutes of oversight / coordination / steering committees / bodies	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A 1.1.2 Tailor generic solution packages to country specific contexts and test them in practice	• Generic solution package is tailored to specific country needs and tested	• Document of tailored solution package • Report on testing the package in the country	
A 1.1.3 Implement priority solution packages in Ghana and Kenya	• PMPA pilot country activities' application of solutions	• Report on implementation of activities	
A 1.1.4 Implement core elements of the operational plan for LPP in Viet Nam, i.e. conduct GMP Assessments, tailor generic GMP Roadmap to Viet Nam and devise an incentives package for the industry's promotion	• Solution packages implemented	• Report on implementation of activities	
A 1.1.5 Support public-private dialogue on LPP policy measures in Viet Nam	• Public-private dialogue forums took place	• Minutes of the forum	
A 1.1.6 Following initial fact-finding, complete pharmaceutical industry strategy building process in 2 additional (African) countries	• (lean) sector scans developed / overview of current status of industry acquired • Strategy building process completed	• (lean) sector scans of respective country • Strategy write-up • Supporting documentation of launch event	
A 1.1.7 Facilitate stakeholder dialogue with the intention to arrive at a shared pharmaceutical industry development strategy in 2 new countries taking the PMPA BP as a reference	• Public-private dialogue forums took place • Development of a sector strategy	• Minutes of the forums • Sector strategy document	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
framework			
A 1.1.8 Agree on strategy and build implementation plan	• Strategy agreed on by multi-stakeholder and respective ministries • Implementation/ operational plan established	• Sector strategy document signed by stakeholders • Implementation plan document	
A 1.1.9 Start/continue implementation of selected priority elements of the strategy in at least one country	• Implementation in country started/continued	• Report on implementation	
A 1.1.10 Conduct IPR assessments to complement the strategy and follow-up training in Ghana, Kenya, Viet Nam and one of the additional countries	• Issue paper on IPR and pharmaceutical industry development in 4 countries	• Issue papers influence strategy building/ implementation	
A 1.1.11 Support operationalization of UNIDO's GMP Roadmap methodology for harmonized application across the ECOWAS region	• ECOWAS GMP Roadmap Regional Framework prepared	• Framework document	Announced funding from WAHO is forthcoming.
A.1.1.12 Prepare a position paper on vaccine production capabilities in Africa and conduct a case study on national vaccine manufacturing capacity and procurement mechanisms in at	• Position paper prepared • Case study write-up(s) prepared	• Position paper • Case study write-up(s)	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
least one country			
Activity Cluster A1.2: Initiate PMPA BP implementation			
A 1.2.1 Develop implementation mechanism for PMPA Business Plan	• Implementation mechanism/ TC program in place	• Program document	
A 1.2.2 Build consortium of UN agencies and other organizations for the joint implementation of the PMPA BP	• Consortium established	• TOR for Consortium accepted by partners	
A 1.2.3 Mobilise resources for PMPA implementation	• Resource mobilisation strategy developed	• Resource mobilisation strategy	
A 1.2.4 Identify possible pilot countries and conduct initial fact finding/ assessments in 3-4 countries	• Agreement with AUC on pilot countries • Mission to countries completed	• Written exchange with AUC • Mission reports + documents	
A 1.2.5 Establish high-level working group across different stakeholder groups	• Agreement on High level working group reached	• MoU	
A 1.2.6 Support the high-level working group in developing a plan of action.	• Plan of action developed by high level working group	• Plan of action (document)	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A 1.2.7 Publicize the PMPA BP adequately and conduct promotional activities	• PMPA BP printed and promoted	• PMPA BP • Overview on outreach of PMPA BP	
Activity Cluster A 2.: Tools (solution packages) developed to support the commercially viable production of quality essential medicines			
A 2.1 Conduct risk assessment of Essential Medicines (EML) for implementation in conjunction with the GMP Roadmap	• Mission completed • EML document designed • Risk assessment integrated with GMP Roadmap and resulting tool calibrated	• Mission report • EML document • Calibration report	
A 2.2 Finalize "generic" GMP Roadmap for tailoring to country specific use under the PMPA BP	• Mission to countries completed • Country specific roadmap designed	• Mission report • Country specific roadmap	
A 2.3 Develop solution package for HR development	• Relevant stakeholders consulted • HR development package designed	• Report on consultations • HR development package (document)	
A 2.4 Develop solution package on access to finance and incentives	• Relevant stakeholders consulted • Solution package on access to finance and incentives designed	• Relevant stakeholders consulted • Solution package on access to finance and incentives designed	
A 2.5 Design and put in place Business Linkages and Partnership Platform including access to technology, and drug formulation development	• Relevant stakeholders consulted • BLPP developed and launched	• Relevant stakeholders consulted • BLPP (has to be defined in detail)	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A 2.6 Develop solution package on Lean Manufacturing and conduct course on efficient production practices through Trade Associations	• Consultant contracted • Document on Lean Manufacturing including course manual developed • Course conducted	• Signed contract • Document on Lean Manufacturing including course manual • Minutes on course	
A 2.7 Train stakeholders on the use of IPR to promote local pharmaceutical production	• Course on IPR conducted	• Minutes of the course	
A 2.8 Publish the background work on selected solution packages as part of a technical working paper series	• Background work printed and promoted	• Papers • Overview on outreach of PMPA BP	
A.2.9 Develop market data tools/solutions	• Concept for market info tool prepared • Implementation mechanism developed • Data collected	• Concept write-up • Implementation plan • Data sample	
Activity Cluster A 3.1: Build capacity of BMOS at regional and continental levels			
A 3.1.1 Assist regional BMO in the Southern African region to develop a sustainable business model	• SAGMA retains members and attracts additional members	• SAGMA membership register	
A 3.1.2 Assist regional BMOs (Southern-, East- and West Africa) to provide relevant services to	• Regional BMOs offer relevant trainings (at least one per year)	Participation in trainings	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
their membership (conduct trainings, provide information)		(participants lists)	
A 3.1.3 Assist regional BMOs (Southern-, East- and West Africa) to engage in advocacy activities to represent their members	• Regional BMOs engage in policy processes in relevant fields	• Invitations addressed at chairperson	
A 3.1.4 Support the Federation of Pharmaceutical Manufacturers Associations (FAPMA) in becoming a private sector organization that can engage in implementation of the PMPA Business Plan	• FAPMA develops internal management structure	• Manual of internal management processes available	
A 3.1.5 Support FAPMA in conducting advocacy and service provision function as adequate under the PMPA BP	• FAPMA engages in policy processes in relevant fields in line with PMPA BP	• Invitations addressed at chairperson to relevant events	

Activity Cluster A 3.2: Enhance capacity of training institutions			
A 3.2.1 Support St Luke Foundation/Kilimanjaro School of Pharmacy, Tanzania in conducting the Industrial Pharmacy Advanced Training (IPAT) and the Master's in Biotechnology, Innovation and Regulatory Science (BIRS)	• At least 25 target beneficiaries trained on the IPAT course • At least 20 target beneficiaries enrolled in Master's	• Course documentation / evaluation	
A 3.2.2 Increase the base of trainers available to teach the training programmes	• At least 3 local trainers trained	• Evaluation	
A 3.2.3 Support Kilimanjaro School of Pharmacy to increase the amount of relevant trainings offered at Moshi, especially at the Industrial Pharmacy Teaching Unit	• At least three training courses that use the IPTU facilities held	• Course documentation / evaluation	
Activity Cluster A 4:			
A 4.1 Conduct Global Forum activities and participate in Workshops, Meetings, Conferences	• Contributions to international debate identified and preparation initiated • Workshops, Meetings, Conferences organized/attended	• Meeting reports • BTOMR At least one event on LPP/PMPA successfully held	
A 4.2 Regularly participate in Interagency Pharmaceutical Coordination Group (IPC)	• Number of meetings attended (2 per year)	• Meeting minutes, Back-to-office mission reports	
A 4.3 Develop and implement communication strategy	• Published project information	• Project brochures, flyers, posters, video clips as appropriate	
A 4.4 Develop resource mobilization strategy	• Strategy document prepared	• Strategy document	

Annex 1b: ID 130209

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[12]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
▫ **IMPACT/** **DEVELOPMENT OBJECTIVE:** ▫ Increase the capacity of local production of essential medicines to supply safe, efficacious and affordable medicines.	• # of enterprises continuously progressing towards international GMP standards (number of companies will depend on the countries ultimately included in the project as the sectors vary in size significantly)	• National regulatory authorities • WHO	▫
OUTCOME(S)/ **IMMEDIATE OBJECTIVE:**			
▫ Pharmaceutical sector development strategies are implemented by the relevant stakeholders (government, pharmaceutical sector support organizations/ institutions and companies) using the recently acquired skills, structural changes, knowledge and capacity.	• KPI: # of enterprises effected by policy Relevant laws/regulations/polices promulgated in supporting local production of essential medicines in line with and defined by the sector development strategy	• Publications of law/ regulation/ policy amendments	• Manufacturers make active use of the improved framework conditions and expand their businesses to produce GMP standard medicines • Political will in target countries to invest in infrastructure for the enforcement of quality standards • Macro-economic factors (e.g. exchange rates, interest rates etc.) do not compromise economic viability.

[12] Wherever possible, the project will apply gender disaggregated indicators and evaluations.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[12]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
OUTPUTS:			
O.5 Pharmaceutical industry development strategies in target countries / at continental level are developed and agreed on by all relevant stakeholders and implementation mechanisms for holistic approach are set up and implementation initiated (depending on respective country context)	• KPI: # of sector master plan / national management plans prepared One strategy/implementation plan per country and one in the PMPA context. In addition, activities according to the implementation plans initiated	• Country specific PMPA BP implementation initiated • Country strategy endorsement & country implementation initiated	• Agreed/required strategies / changes in legislation and regulatory stipulations pass requisite procedures. • Willingness of governments/ donors to finance and implement programs that enable the pharmaceutical industry to develop and use regional market opportunities. • The high-level interest in countries is maintained and translates into commitment from stakeholders at the operational level. Government departments are willing and able to work across departments.
O.6 Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed and applied in the country context	• KPI: # of reports / technical publications prepared/distributed Use of tools on the country level according to the country implementation plan At least 1 technical publications outlining the tools exist and are distributed	• Publications disseminated • Stakeholders (MOI/MOH) confirm the application of the tools in the country context	• Tools/solution packages are accepted by respective policy makers and actively used by the industry

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[12]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
O.7 Institutions are guided towards self-sufficiency. Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered.	• KPI: # of membership organizations support./communities organized • Annual deficit between spending and operational revenue is constantly shrinking. African regional Business Membership Organizations (BMO) participate in relevant policy processes • KPI: # of end-users / beneficiaries trained • Participants in training services offered by BMOs and Kilimanjaro School of Pharmacy, Tanzania	• Invitations indicate that BMOs are accepted to represent the private sector at events/conferences • Annual balance sheet. • Members are benefitting from services offered (i.e. participate in trainings) • Training materials and participants list for IPAT	• Institutions could attract a sufficient number of paying members/ customers • Institutions are able to represent the private sector (in terms of composition and membership) • SADC policies related to LPP progress so that SAGMA has a field of operations (regional regulatory harmonization) • Trainers are in good health and able to travel to Tanzania • Employers stick to agreement and release participants for training, participants can fund accommodation/travel costs.
O.8 Information exchange on and awareness of LPP is enhanced	• KPI: # of reports / technical publications prepared/distributed At least 1 reports / technical publications/ articles prepared and distributed Partnerships in the PMPA context are maintained	• Reports published by UNIDO • Partnership meetings in the PMPA context conducted	• Sufficient interest in development of the pharmaceutical sector is sustained by the international community and funding becomes available for broader implementation • Other stakeholders are receptive to findings, and vested interests do not block impartial assessment of

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[12]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
			findings. • Individuals within partner organisations do not derail potential agreements and working relationships on the basis of dogmatic perspectives.
ACTIVITIES			
Activity Cluster A 1.1: Implement pharmaceutical industry development strategies in Ghana and Kenya, and formulate strategy in one additional African country			
A 1.1.1 Support the government of Kenya in the implementation of the pharmaceutical sector development strategy.	• Strategy implementation in collaboration with relevant stakeholders is conducted as planned	• Minutes of stakeholder meetings	
A 1.1.2 Finalize pharmaceutical industry development strategy and prepare implementation plan in another country identified in phase 4	• Strategy is endorsed by stakeholders and development of a detailed operational implementation plan prepared	• Sector strategy document • Submission of the agreed implementation plan to the relevant ministry	
Activity Cluster A1.2: Continue PMPA Business Plan implementation			
A 1.2.1 Coordinate on-going negotiations to establish the institutional/ management structure (including consortium of core	• Management structure (consortium) capable of acting effectively and implementation initiated	• Minutes of management (consortium)	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[12]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
partners); and collaborate with the nucleus of partners in early implementation of the Business Plan in Ghana.		meetings • Minutes of stakeholder meetings	
A 1.2.2 Mobilise resources for PMPA implementation and a broader UNIDO pharma programme	• Request for funding submitted to potential donors	• Funding request document	
Activity Cluster A 2.: Tools (solution packages) developed and applied to support the commercially viable production of quality essential medicines			
A 2.1 Finalize risk assessment of Essential Medicines (EML) for implementation in conjunction with the GMP Roadmap preparation	• Mission completed • EML document designed	• Mission report • EML document	
A 2.2 Work with the University of St. Gallen to tailor their programme on operational excellence in pharmaceutical manufacturing (OPEX) to the specific contexts of different African countries to support the development of a sustainable industry	• OPEX tool tailored to and applied in country context	• Country specific OPEX strategy • Reports on company level application	
A 2.3 Publish the background work on selected solution packages as part of a technical working paper series	• Background work printed and promoted	• Papers	
Activity Cluster A 3.1: Build capacity and financial sustainability of BMOs at regional and continental level			
A 3.1.1 Selective support to SAGMA in restructuring the association and in aiming to reach gradually sustainability	• New structure established in SAGMA and revenue-spending-ratio improved	• SAGMA board minutes • Annual financial	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[12]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
		statement	
A 3.1.2 Continue to support the Federation of Pharmaceutical Manufacturers Associations (FAPMA) on its way to financial sustainability and becoming an established and effective continental private sector organization	• FAPMA recognized as continental representative of pharmaceutical manufacturers • Organization is gradually improving revenue-spending-ratio	• Number of invitation to continental industry relevant events • Annual financial statement	
Activity Cluster A 3.2: Enhance capacity of training institutions			
A 3.2.1 Support St Luke Foundation/Kilimanjaro School of Pharmacy, Tanzania in conducting the Industrial Pharmacy Advanced Training (IPAT)	• At least 25 target beneficiaries trained on the IPAT course	• Course documentation / evaluation	
A 3.2.2 Support Kilimanjaro School of Pharmacy to expand training activities.	• At least two additional training courses that use the IPTU facilities held	• Course documentation / evaluation	

Activity Cluster A 4:			
A 4.1 Conduct Global Forum activities and participate in Workshops, Meetings, Conferences	• Contributions to international debate identified and preparation initiated • Workshops, Meetings, Conferences organized/attended	• Meeting reports • BTOMR	
A 4.2 Regularly participate in Interagency Pharmaceutical Coordination Group (IPC)	• Number of meetings attended (2 per year)	• Meeting minutes, Back-to-office mission reports	

Annex 1c: ID 140292

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
▫ **IMPACT/ DEVELOPMENT OBJECTIVE:** ▫ Increase the capacity of local production of essential medicines to supply safe, efficacious and affordable medicines.	• # of enterprises continuously progressing towards international GMP standards (number of companies will depend on the countries ultimately included in the project as the sectors vary in size significantly)	• National regulatory authorities • WHO	▫
OUTCOME(S)/ IMMEDIATE OBJECTIVE:			
▫ Pharmaceutical sector development strategies are implemented by the relevant stakeholders (government, pharmaceutical sector support organizations/ institutions and companies) using the recently acquired skills, structural changes, knowledge and capacity.	• KPI: # of enterprises effected by policy Relevant laws/regulations/polices promulgated in supporting local production of essential medicines in line with and defined by the sector development strategy	• Publications of law/ regulation/ policy amendments	• Manufacturers make active use of the improved framework conditions and expand their businesses to produce GMP standard medicines • Political will in target countries to invest in infrastructure for the enforcement of quality standards • Macro-economic factors (e.g. exchange rates, interest rates etc.) do not compromise economic viability.

[13] Wherever possible, the project will apply gender disaggregated indicators and evaluations.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
OUTPUTS:			
O.9 Pharmaceutical industry development strategies in target countries / at continental level are developed and agreed on by all relevant stakeholders and implementation mechanisms for holistic approach are set up and implementation initiated (depending on respective country context)	• KPI: # of sector master plan / national management plans prepared One strategy/implementation plan per country and one in the PMPA context. In addition, activities according to the implementation plans initiated	• Country specific PMPA BP implementation initiated • Country strategy endorsement & country implementation initiated	• Agreed/required strategies / changes in legislation and regulatory stipulations pass requisite procedures. • Willingness of governments/ donors to finance and implement programs that enable the pharmaceutical industry to develop and use regional market opportunities. • The high level interest in countries is maintained and translates into commitment from stakeholders at the operational level. Government departments are willing and able to work across departments.
O.10 Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed and applied in the country context	• KPI: # of reports / technical publications prepared/distributed Use of tools on the country level according to the country implementation plan At least 1 technical publications outlining the tools exist and are distributed	• Publications disseminated • Stakeholders (MOI/MOH) confirm the application of the tools in the country context	• Tools/solution packages are accepted by respective policy makers and actively used by the industry

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
O.11 Institutions are guided towards self-sufficiency. Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered.	• KPI: # of membership organizations support./communities organized • Annual deficit between spending and operational revenue is constantly shrinking. African regional Business Membership Organizations (BMO) participate in relevant policy processes • KPI: # of end-users / beneficiaries trained • Participants in training services offered by BMOs and Kilimanjaro School of Pharmacy, Tanzania	• Invitations indicate that BMOs are accepted to represent the private sector at events/conferences • Annual balance sheet. • Members are benefitting from services offered (i.e. participate in trainings) • Training materials and participants list for IPAT	• Institutions could attract a sufficient number of paying members/ customers • Institutions are able to represent the private sector (in terms of composition and membership) • SADC policies related to LPP progress so that SAGMA has a field of operations (regional regulatory harmonization) • Trainers are in good health and able to travel to Tanzania • Employers stick to agreement and release participants for training, participants can fund accommodation/travel costs.
O.12 Information exchange on and awareness of LPP is enhanced	• KPI: # of reports / technical publications prepared/distributed At least 1 reports / technical publications/ articles prepared and distributed	• Reports published by UNIDO • Partnership meetings in the PMPA context conducted	• Sufficient interest in development of the pharmaceutical sector is sustained by the international community and funding becomes available for broader implementation • Other stakeholders are receptive to findings, and vested interests do not block

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Partnerships in the PMPA context are maintained		impartial assessment of findings. • Individuals within partner organisations do not derail potential agreements and working relationships on the basis of dogmatic perspectives.
ACTIVITIES			
Activity Cluster A 1.1: Implement pharmaceutical industry development strategies in Ghana and Kenya, and formulate strategy in one additional African country			
A 1.1.1 Kenya: Support the implementation of the Kenya GMP Roadmap by Activities under the GIZ Grant 1.1.1.1-1.1.1.4	• GMP Roadmap implementation in collaboration with relevant stakeholders progresses as planned	• Minutes of stakeholder meetings	
A 1.1.1.1 Support companies in Kenya by assessing upgrading needs (GIZ Grant)	• Gap analysis is conducted at least 20 companies	• Inspection/gap-analysis reports	*Companies translate findings of gap analysis into CAPA*
A.1.1.1.2 Support to the Regulator (PPB) to fulfil role in implementation of the Kenya GMP Roadmap (GIZ Grant)	• At least 2 PPB inspectors trained • At least one process at PPB reviewed •	• Joint company reports PPB/UNIDO experts • Advisory input generated by	• *PPB is willing to contribute staff as in-kind contribution for training* • *PPB staff can schedule joint company visits (according to experience staff have a*

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
		UNIDO/ BfARM experts •	*preference for travel abroad due to higher financial benefits)* *PPB leadership stays committed to GMP Roadmap implementation process*
A.1.1.1.3 Providing training and ad-hoc advice as part of the Kenya GMP Roadmap Implementation (GIZ Grant)	• At least 20 companies receive training on priority technical or managerial topics	• Reports of company visits • Training reports	• *Companies stay committed to GMP Roadmap implementation process and are willing to engage in required technical and managerial skills upgrading (make relevant/appropriate staff available)* Employers release participants for training, participants can fund required accommodation/travel costs.
A.1.1.1.4 Contribute to inter-regional exchange of experience on Kenya GMP Roadmap (GIZ Grant)	• Contribute inputs (presentation or article) to exchange of experience	• presentation or article	*Event or publication takes place (coordinated by other agency)*
A 1.1.2 Ghana: Support the implementation of the pharmaceutical sector development strategy	• Strategy (Roadmap) implementation in collaboration with relevant stakeholders progresses as planned	• Minutes of stakeholder meetings	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
Activity Cluster A1.2: Continue PMPA Business Plan implementation			
A 1.2.1 PMPA BP: Coordinate core partners to establish structures for the PMPA BP implementation	• Management structure (consortium) capable of acting effectively and implementation initiated	• Minutes of management (consortium) meetings • Minutes of stakeholder meetings	
A 1.2.2 Develop detailed TC programme document for supporting PMPA BP implementation	• TC programme document ready	• Programme document available	
A.1.2.3 Mobilise resources for PMPA implementation	• Request for funding submitted to potential donors	• Funding request document	
A.1.2.4 Coordinate PMPA BP implementation support in Ghana	• Implementation plan is adhered to	• Minutes of management (consortium) meetings	
Activity Cluster A 2.: Tools (solution packages) developed and applied to support the commercially viable production of quality essential medicines			
A 2.1 Develop training modules on pharmaceutical company upgrading	• Training modules ready	• Module published	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A.2.2 Build a market information system in four EAC countries	• Market information system in place	• Data on the pharmaceutical markets in the EAC is being collected and becomes available	
A.2.3 Build a market information system in Vietnam	• Market information system in place	• Data on the pharmaceutical markets in Vietnam is being collected and becomes available	
A.2.4 Train NMRAs in maintaining the system	• Personnel at NMRAs trained in using the market information system	• Participant's lists	
Activity Cluster A 3.1: Build capacity and financial sustainability of BMOs at regional and continental level			
A 3.1.1 Selective support to SAGMA in restructuring the association and in aiming to reach gradually sustainability	• New structure established in SAGMA and revenue-spending-ratio improved	• SAGMA board minutes • Annual financial statement	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A 3.1.2 Continue to support the Federation of Pharmaceutical Manufacturers Associations (FAPMA) on its way to becoming an established and effective continental private sector organization	• FAPMA recognized as continental representative of pharmaceutical manufacturers • Organization is gradually improving revenue-spending-ratio	• Number of invitation to continental industry relevant events • Annual financial statement	
A.3.1.3 Support Federation of East African Pharmaceutical Manufacturing Associations (FEAPM) in offering an internship training to member companies	• Curriculum for internship training developed • At least 20 prospective interns have received training preparing them for industry placement	• Training Materials • Participants list	• University staff dedicates time to curriculum development/ training of trainers as agreed • Students are willing to dedicate their time to the training • Students are willing and able to travel to trainings within EAC
A 3.1.4 Support African Vaccines Manufacturers Initiative (AVMI) to assess the feasibility of vaccines production in Africa	• Pre agreed parts of Vaccine Manufacturing and Procurement in Africa (VMPA) study ready	• VMPA document	
Activity Cluster A 3.2: Enhance capacity of training institutions			
A 3.2.1 Support St Luke Foundation/Kilimanjaro School of Pharmacy, Tanzania in conducting the Industrial	• At least 25 target beneficiaries trained on the IPAT course	• Course documentation / evaluation	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[13]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
Pharmacy Advanced Training (IPAT)			
A 3.2.2 Support SLF/KSP in offering Master's course	• At least 20 participants obtain Master's degree	• Degree certificates	
Activity Cluster A 4:			
A 4.1 Conduct Global Forum activities and participate in Workshops, Meetings, Conferences	• Contributions to international debate identified and preparation initiated • Workshops, Meetings, Conferences organized/attended	• Meeting reports • BTOMR	

Annex 1d: ID 160202

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
▫ **IMPACT/ DEVELOPMENT OBJECTIVE:** ▫ Increase the capacity of local production of essential medicines to supply safe, efficacious and affordable medicines.	• # of enterprises continuously progressing towards international GMP standards (The number of companies will depend on the countries ultimately included in the project as the sectors vary in size significantly.)	• National regulatory authorities • WHO	▫
OUTCOME(S)/ IMMEDIATE OBJECTIVE:			
▫ Pharmaceutical sector development strategies are implemented by the relevant stakeholders (government, pharmaceutical sector support organizations/institutions and companies) using the recently acquired skills, structural changes, knowledge and capacity.	• KPI: # of enterprises affected by policy Relevant laws/regulations/polices promulgated in supporting local production of essential medicines in line with and defined by the sector development strategy at national and/or regional level	• Publications of law/ regulation/ policy amendments	• Manufacturers making active use of the improved framework conditions and expand their businesses to produce GMP standard medicines • Political will in target countries to invest in infrastructure for the enforcement of quality standards • Economic viability not compromised by macro-economic factors (e.g. exchange rates, interest rates etc.)
OUTPUTS:			
0.13 Pharmaceutical industry development strategies in target	• KPI: # of sector master plan / national management plans	• Regional strategy endorsement &	• Agreed/required strategies / changes in legislation and regulatory

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
geographies are developed and agreed on by all relevant stakeholders and implementation mechanisms for holistic approach are set up and implementation initiated (depending on respective geographic context).	prepared One strategy/implementation plan per target geography. In addition, activities according to the implementation plan(s) initiated	implementation initiated	stipulations passing requisite procedures • Willingness of governments / donors to finance and implement programs that enable the pharmaceutical industry to develop and use regional market opportunities • High level interest in countries maintained and translating into commitment from stakeholders at the operational level; government departments willing and able to work across departments
0.14 Tools (solution packages) to support the production of quality essential medicines in an economically viable manner are developed and applied in the country context.	• KPI: # of reports / technical publications prepared/distributed Use of tools at the country level according to the country implementation plan At least 1 technical publication outlining the tools exists and is distributed	• Publication(s) disseminated • Stakeholders (e.g. MOI/MOH) confirm the application of the tools in the country context	• Tools/solution packages are accepted by respective policy makers and actively used by the sector.
0.15 Institutions are guided towards self-sufficiency. Capacity is built at sector specific private sector support organizations regarding advocacy function and services offered.	• KPI: # of end-users / beneficiaries trained Participants in training services offered by KSP, Tanzania	• Training materials and participants list for IPAT and BIRS	• Trainers are in good health and able to travel to Tanzania. • Employers stick to agreement and release participants for training, participants can fund accommodation/travel costs.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
0.16 Information exchange on, and awareness of, LPP is enhanced	• KPI: # of reports / publications prepared/distributed At least 1 report / publication / article prepared and distributed Partnerships in the PMPA context are maintained	• Reports published by UNIDO • Partnership meetings in the PMPA context conducted	• Sufficient interest in development of the pharmaceutical sector is sustained by the international community. • Other stakeholders are receptive to findings/achievements, and vested interests do not block impartial assessment of findings/achievements. • Individuals within partner organisations do not derail potential agreements and working relationships on the basis of dogmatic perspectives.
ACTIVITIES			
Activity Cluster A 1.1: Operationalize the GMP Roadmap approach for application in the ECOWAS region			
A 1.1.1 Conduct fact finding through desk research and missions to different Member States	• Latest information on the status of the sector in each manufacturing country are gathered. • Situation of concurrent initiatives such as the AMRH are understood.	• BTOMR • First Interim Progress Report	• WAHO provides the required coordination support and facilitates liaison with relevant national counterparts.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A 1.1.2 Hold kick-off workshop for induction, planning and coordination purposes with UNIDO staff/consultants, WAHO representative(s) and the Executive Secretary of WAPMA	• Relevant stakeholders are identified and invited. • Logistic and technical preparations for the meeting are duly made. • Plan for the preparation and conduct of the first regional sensitization workshop is finalized • Detailed implementation modalities for Phase 2 are agreed upon.	• Aide memoire of the meeting incl. list of invitees and agenda • Presentation slides • Planning document(s) • First Interim Progress Report	• Sufficient workshop attendance
A.1.1.3 Hold Regional Workshop 1	• Relevant stakeholders are identified and invited. • Logistic and technical preparations for the meeting are duly made. • Mutual understanding of the impending GMP Roadmap intervention reached	• Aide memoire of the meeting incl. list of invitees and agenda • Presentation slides • First Interim Progress Report	• WAHO provides the required coordination support and facilitates liaison with relevant national counterparts. • Invited stakeholders attend the meeting.
A.1.1.4 Conduct exploratory company assessments	• # of assessed companies: - At least 1 company in each of the following countries: Benin, Cape Verde, Cote d'Ivoire, Guinee Conakry, Mali, Senegal, Togo - A sample of 20-25 companies operating at distinct levels of GMP compliance in Nigeria	• Assessment Reports[ii] • Aggregated/anonymized assessment results as contained in (a) presentation slides of subsequent project workshops, (b) the Second Interim Progress Report and/or	• Selected companies are amenable to being party to the assessments. • WAHO, NFPs and NMRAs provide the required coordination support.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
		(c) (draft) write-ups of the regional GMP Roadmap Framework including any related documentation at national level	
A.1.1.5 Hold GMP awareness workshops for key stakeholders	• 1 training each is held for representatives from: - Nigeria; - Other anglophone countries; - Francophone/lusophone countries. • Participants are made aware of the major implications of GMP and for the pharmaceutical sector.	• Aide memoires of the trainings incl. lists of invitees and agendas • Training materials • Attendance lists • Survey of participants	• WAHO and NFPs provide the required organizational/logistic support. • Invited stakeholders attend the meeting and participate in survey.
A.1.1.6 Analyse findings from the assessments	• GMP Roadmap process is validated at national levels. • Current variability in national levels of GMP compliance is understood.	• Second Interim Progress Report	
A.1.1.7 Draft Regional GMP Roadmap Framework	• Framework draft is disseminated for consideration by national working groups	• List of national working group members having received the Framework draft • Amended Framework	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
		draft accommodating inputs from national working group members, if any	
A.1.1.8 Hold Regional Workshop 2	• Relevant stakeholders are invited. • Logistic and technical preparations for the meeting are duly made.	• Aide memoire of the meeting incl. list of invitees and agenda • Presentation slides • Second Interim Progress Report	• WAHO provides the required organizational/logistic support.
A.1.1.9 Finalize Regional GMP Roadmap Framework	• Updated final version of the Regional GMP Roadmap Framework is disseminated	• List of addressees of circulation exercise	
A.1.1.10 Conduct in-depth trainings for industry and regulatory staff on technical GMP requirements	• # of trainings held: - 1 regulatory and 5 industry workshops in Nigeria - 1 regulatory and 1 industry workshop each for (i) other anglophone countries and (ii) francophone/lusophone countries • Participants gain an in-depth understanding of technical GMP requirements.	• Aide memoires of the trainings incl. lists of invitees and agendas • Training materials • Attendance lists • Survey of participants	• WAHO and NFPs provide the required organizational/logistic support. • Invitees attend the meeting and participate in survey.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A.1.1.11 Develop national GMP roadmap for Nigeria	• National GMP roadmap draft is circulated among national working group members	• List of national working group members having received the roadmap draft • Amended roadmap draft accommodating inputs from national working group members, if any	
A.1.1.12 Provide top level strategic guidance for sector development in Nigeria	• National GMP Roadmap process is complemented by strategic inputs on pharmaceutical sector development.	• Documentation supporting the guidance imparted	• Sufficient political interest and buy-in can be secured with help of WAHO and the national working group.
A. 1.1.13 Conduct CAPA trainings	• 1 CAPA training each is held for staff from (a) industry (CAPA plan development) and (b) regulator (monitoring CAPA plan implementation) from (i) anglophone and (ii) francophone/lusophone countries with pharmaceutical manufacturing capacities. • Industry participants gain understanding of CAPA plan development. • Regulatory participants acquire	• Aide memoires of the trainings incl. lists of invitees and agendas • Training materials • Attendance lists • Survey of participants	• WAHO and NFPs provide the required organizational/logistic support. • Invitees attend the meeting and participate in survey.

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
	skills required for CAPA plan implementation.		
A.1.1.14 Conduct CAPA clinics	• Guidance is provided on each CAPA plan prepared by companies.	• Amended CAPA plans[ii]	• Companies participate in CAPA clinics
A.1.1.15 Hold Regional Workshop 3	• Relevant stakeholders are invited. • Logistic and technical preparations for the meeting are duly made. • Country level interventions are presented and an outlook is given at possible next steps	• Aide memoire of the meeting incl. list of invitees and agenda • Presentation slides • Terminal Progress Report	• WAHO provides the required organizational/logistic support.
Activity Cluster A 2.1: Establish a sustainable Pharmaceutical Market Information System (PMIS) in Viet Nam			
A 2.1.1 Perform classification of registered medicines and introduce system changes to the registration database as required for facilitated medicine coding in the future	• All registered medicines classified • Required system changes implemented	• File with coded medicine data • Registration database at DAV	• Essential information parameters required for the medicines coding are available in electronic field form. • DAV grants access to its registration database and is willing to implement suggested system changes.
A.2.1.2 Advocate and establish improved procedures for data reporting by domestic pharmaceutical manufacturers	• Appropriate data reporting procedures in place	• PMIS includes data on locally produced medicines	• VNPCA and DAV use their influence to ensure compliance by domestic pharmaceutical manufacturers

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
A.2.1.3 Create and operationalize linkages between different information sources required for systematized data integration, including interfacing and software changes for data input, retrieval and analysis	• Market information system in place	• Data on the pharmaceutical market in Vietnam is being collected and becomes available.	• Raw data to be integrated is available in electronic field form.
A.2.1.4 Train stakeholders in using and maintaining the system	• Stakeholders trained in using and maintaining the system	• Participant's lists	
Activity Cluster A 3.1: Enhance capacity of training institutions			
A 3.1.1 Support SLF/KSP in conducting the IPAT (courses in March and September 2017)	• At least 25 target beneficiaries trained on the IPAT courses	• Course documentation / evaluation	
A 3.1.2 Support SLF/KSP in completing a BIRS Master's cycle (course in March 2017)	• At least 20 participants obtain Master's degree	• Degree certificates	
Activity Cluster A 4:			
A 4.1 Develop and implement strategy on knowledge management and communication for (i) the UNIDO project and (ii) PMPA BP /	• Communication strategy developed • At least one advocacy document	• Write-up of communication strategy • Advocacy document	

INTERVENTION LOGIC	OBJECTIVELY VERIFYABLE INDICATORS[i]	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
broader LPP agenda (involving principal partners)	published and circulated		
A 4.2 Execute resource mobilization strategies for (i) UNIDO-based LPP activities and (ii) operationalization of the PMPA BP	• Number of identified donors approached	• Meeting minutes • BTOMR	

Annex 2: Detailed questions to assess evaluation criteria (see annex 2 of UNIDO Evaluation Manual)

Annex 3: Job descriptions

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 Austria (Vienna), and to Burkina Faso (Bobo-Dioulasso), Ethiopia (Addis Ababa) and Tanzania (Arusha)
Start of Contract (EOD):	[01/10/2018]
End of Contract (COB):	[31/12/2018]
Number of Working Days:	41-50 working days spread over 3 months

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 results 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. 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

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

The international evaluation consultant/team leader will evaluate the project in accordance with the evaluation-related terms of reference (TOR). He/she will perform, inter alia, the following main tasks:

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
Undertake a desk review of project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); determine key data to collect in the field and adjust the key data collection instruments accordingly (if needed);	Division of evaluation tasks with the National Consultant An adjusted table of evaluation questions, depending on country specific context A draft list of stakeholders to be interviewed during the evaluation field	5 days	Home-based

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
Assess the adequacy of legislative and regulatory framework relevant to the project's activities and analyze other background info.	mission A brief assessment of the adequacy of the country's legislative and regulatory framework		
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, detailed evaluation methodology confirmed, draft theory of change, and tentative agenda for field work	Inception report submitted to the evaluation manager	3 days	Home-based
Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ.	Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to be interviewed and planned site visits) submitted to evaluation and project manager	2 days	Vienna, Austria
3. Undertake evaluation field mission[14] to consult field project stakeholders, partners and beneficiaries to verify and complete preliminary evaluation findings from desk review and assess the institutional capacities of the recipient country	Field mission conducted Evaluation/debriefing presentation of the evaluation's preliminary findings prepared, draft conclusions, recommendations and lessons learnt to stakeholders in the country, at the end of the mission Agreement with the National Consultant on the structure and content of the evaluation report and the distribution of writing tasks	20-25 days	Burkina Faso, Ethiopia, Ghana, Kenya, Myanmar, Tanzania, Viet Nam, Zimbabwe
4. Debriefing mission: Present preliminary findings, recommendations and lessons learnt to project stakeholders at UNIDO HQ for factual validation	Power point presentation Feedback from stakeholders obtained and discussed Additional meetings held	2 days	Vienna, Austria

[14] The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and the country counterparts.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
and comments Hold additional meetings with and obtain additional data from evaluation/project manager and other stakeholders as required	as required		
5. Prepare the draft evaluation report, with inputs from the National Consultant, and in accordance with the evaluation TOR Submit draft evaluation report to the evaluation manager for feedback and comments	Draft evaluation report submitted to evaluation manager for review and comments	6/8 days	Home-based
6. Revise the draft evaluation report based on comments and suggestions received through the evaluation manager and edit the language and finalize the evaluation report according to UNIDO Independent Evaluation Division standards Prepare a two pages summary of a take-away message from the evaluation	Final evaluation report submitted to evaluation manager Two pages summary take-away message from the evaluation submitted to the evaluation manager	3/5 days	Home-based
	TOTAL	41/50 days	

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in pharmaceutical sciences, public health, economics, development studies or related areas.

Technical and functional experience:

- Minimum of 10 years' experience in project management and/or evaluation (of TC projects) including at the thematic interface between health and industrial development
- Experience in the evaluation of UNIDO projects 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, including Burkina Faso, Ethiopia, Ghana, Kenya, Myanmar, Tanzania, Viet Nam, Zimbabwe

Languages: Fluency in written and spoken English is required. French would be an asset.

Reporting and deliverables

1) At the beginning of the assignment the Consultant will submit a concise Inception Report that will outline the general methodology and present a concept Table of Contents.
2) The country assignment will have the following deliverables:
   - Presentation of initial findings of the mission to key national stakeholders
   - Draft report
   - Final report, comprising of executive summary, findings regarding design, implementation and results, conclusions and recommendations
3) Debriefing at UNIDO HQ:
   - Presentation and discussion of findings
   - Concise summary and comparative analysis of the main results of the evaluation report

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.

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

Title:	Regional evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Missions to Ghana (Accra), Kenya (Nairobi)and Zimbabwe (Harare)
Start of Contract:	[01/10/2018]
End of Contract:	[31/12/2018]
Number of Working Days:	25-30 days spread over 3 months

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 results 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.

PROJECT CONTEXT

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

As evaluation team member, the national evaluation consultant will evaluate the project according to the terms of reference (TOR) under the leadership of the team leader (international evaluation consultant). S/he will perform, inter alia, the following main tasks:

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
Desk review 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 Russian (questionnaires, logic models) as required If need be, recommend adjustments to the tools in order to ensure their understanding in	• A list of evaluation questions; questionnaires /interview guide; logic models adjusted to ensure understanding in the national context • A list of key data available; and to be collected • A brief assessment of the adequacy of	7 days	Home-based

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
the local context Coordinate and lead interviews in local language and assist the team leader with translation where necessary Analyze and assess the adequacy of legislative and regulatory framework, specifically in the context of the project's objectives and targets	the country's legislative and regulatory framework in the context of the project • Input to inception report		
Coordination of evaluation field 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 Assist and provide detailed analysis and inputs to the team leader in the preparation of the inception report	• Detailed evaluation schedule • List of stakeholders to be interviewed during the field mission	6 days	Home-based (telephone interviews)
Participation in interviews during evaluation field missions	• Interview notes • Input to presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission	6-10 days	Home based, including in-country project sites
Draft evaluation report Prepare inputs and analysis to the evaluation report according to TOR and as agreed with the team leader	Inputs to the draft evaluation report submitted to evaluation team leader	4 days	Home-based
Final evaluation report and summary take-away message Contribute to the finalization of the evaluation report on basis of comments and suggestions received through the evaluation team leader Contribute to the preparation of a two pages summary of a take-	Inputs to the Final evaluation report submitted to evaluation team leader	2-3 days	Home-based

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
away message from the evaluation			
TOTAL		**25-30 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 university degree in pharmaceutical sciences, public health, economics, development studies or related areas.

Technical and functional experience:
- Exposure to the needs, conditions and problems in developing countries.
- Familiarity with the institutional and thematic context of the project is desirable.
- Experience in the evaluation of development cooperation in developing countries is an asset

Languages: Fluency in written and spoken English 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

Acknowledgement (incl. list of evaluation team members)
Abbreviations and acronyms
Glossary of evaluation-related terms
Executive summary

- Must provide a synopsis of the storyline which includes the main evaluation findings and recommendations
- Must present strengths and weaknesses of the project
- Must be self-explanatory and should be maximum 3-4 pages in length

I. Evaluation objectives, methodology and process

- Information on the evaluation: why, when, by whom, etc.
- Scope and objectives of the evaluation, main questions to be addressed
- Information sources and availability of information
- Methodological remarks, limitations encountered and validity of the findings

II. Country and project background

- Brief country context: an overview of the economy, the environment, institutional development, demographic and other data of relevance to the project
- Sector-specific issues of concern to the project[15] and important developments during the project implementation period
- Project summary:
    - Fact sheet of the project: including project objectives and structure, donors and counterparts, project timing and duration, project costs and co-financing
    - Brief description including history and previous cooperation
    - Project implementation arrangements and implementation modalities, institutions involved, major changes to project implementation
    - Positioning of the UNIDO project (other initiatives of government, other donors, private sector, etc.)
    - Counterpart organization(s)

III. Project assessment

This is the key chapter of the report and should address all evaluation criteria and questions outlined in the TOR (see section VI Project Evaluation Parameters). Assessment must be based on factual evidence collected and analyzed from different sources. The evaluators' assessment can be broken into the following sections:

A. Project design
B. Implementation performance
    - Ownership and relevance (Report on the relevance of project towards countries and beneficiaries, country ownership, stakeholder involvement)
    - Effectiveness (The extent to which the development intervention's objectives, outcomes and deliverables were achieved, or are expected to be achieved, taking into account their relative importance)

[15] Explicit and implicit assumptions in the logical framework of the project can provide insights into key-issues of concern (e.g. relevant legislation, enforcement capacities, government initiatives, etc.)

- Efficiency (Report on the overall cost-benefit of the project and partner countries' contribution to the achievement of project objectives)
- Likelihood of sustainability of project outcomes (Report on the risks and vulnerability of the project, considering the likely effects of socio-political and institutional changes in partner countries, and its impact on continuation of benefits after the project ends, specifically the financial, socio-political, institutional framework and governance, and environmental risks)
- Project coordination and management (Report project management conditions and achievements, and partner countries commitment)
- Assessment of monitoring and evaluation systems (Report on M&E design, M&E plan implementation, and budgeting and funding for M&E activities)
- Monitoring of long-term changes
- Assessment of processes affecting achievement of project results (Report on preparation and readiness / quality at entry, financial planning, UNIDO support, co-financing, delays of project outcomes/outputs, and implementation approach)

C. Gender mainstreaming

At the end of this chapter, an overall project achievement rating should be developed as required in annex 7. The overall rating table should be presented here.

IV. Conclusions, recommendations and lessons learned

This chapter can be divided into three sections:

A. Conclusions

This section should include a storyline of the main evaluation conclusions related to the project's achievements and shortfalls. It is important to avoid providing a summary based on each and every evaluation criterion. The main conclusions should be cross-referenced to relevant sections of the evaluation report.

B. Recommendations

This section should be succinct and contain few key recommendations. They should:

- be based on evaluation findings
- be realistic and feasible within a project context
- indicate institution(s) responsible for implementation (addressed to a specific officer, group or entity who can act on it) and have a proposed timeline for implementation if possible
- be commensurate with the available capacities of project team and partners
- take resource requirements into account.

Recommendations should be structured by addressees:

- UNIDO
- Government and/or Counterpart Organizations
- Donor

C. Lessons learned

- Lessons learned must be of wider applicability beyond the evaluated project but must be based on findings and conclusions of the evaluation
- For each lesson, the context from which they are derived should be briefly stated

For further guidance on the formulation and expected quality of lessons learned, please consult the guidance document on lessons learned prepared by the UNIDO Independent Evaluation Division (annex 6). The document also includes a checklist on the quality of lessons learned.

Annexes should include the evaluation TOR, list of interviewees, documents reviewed, a summary of project identification and financial data, including an updated table of expenditures to date, and other detailed quantitative information. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Annex 5: Checklist on evaluation report quality

Project title: Strengthening the local production of essential medicines in developing countries through advisory and capacity-building support (Phases 4-6)
UNIDO Project IDs: 120117, 130209, 140292, 160202
Evaluation team
Evaluation team leader:
Evaluation manager (IED):
Quality review done by: Date:

Report quality criteria	UNIDO Independent Evaluation Division 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?		

Report quality criteria	UNIDO Independent Evaluation Division assessment notes	Rating
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 and checklist on lessons learned quality criteria

UNIDO evaluation lessons learned

Definition

Focus on generalization

The Organisation for Economic Cooperation and Development's (OECD) Development Assistance Committee (DAC) (2002) defines lessons learned related to the evaluation of development assistance as follows: "***Generalizations based on evaluation experiences*** *with projects, programs, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact."*[16]

Focus on transferability & generalization

The International Labour Organisation (ILO) provides one of the most comprehensive definitions of lessons learned with relevance for evaluations in the UN system (2014) "***A lesson learned is an observation from project or programme experience which can be translated into relevant, beneficial knowledge by establishing clear causal factors and effects****. It focuses on a specific design, activity, process or decision and may provide either positive or negative insights on operational effectiveness and efficiency, impact on the achievement of outcomes, or influence on sustainability.* ***The lesson should indicate, where possible, how it contributes to 1) reducing or eliminating deficiencies; or 2) building successful and sustainable practice and performance***"[17]*.*

UNIDO evaluation lessons learned contain information about the context, challenges, causal factors, target users and success/failure, as also shown in below **Lessons learned quality criteria checklist.**

What is not a lesson learned?

Lessons learned are not:	Simply restating or paraphrasing existing doctrine, policy, process, etc. This does not qualify as an appropriate and bona fide lessons learned[18].

[16] http://www.oecd.org/dataoecd/29/21/2754804.pdf

[17] ILO Evaluation Unit, 2014: Guidance Note 3: Evaluation lessons learned and emerging good practices

[18] www.dtic.mil/ndia/2004cmmi/CMMIT2Tue/LessonsLearnedtc3.pdf

	Just applicable to a specific situation but applicable to a generic situation[19] The same as recommendations. Recommendations usually refer to very specific situations including who should take action on what by when

[19] *www.globalhivmeinfo.org/Pages/Glossary.aspx* globalhivmeinfo.org/DigitalLibrary/Digital%20Library/Glossary%20of%20Monitoring%20and%20Evaluation%20Terms.doc

Examples of lessons learned

Source	Well-identified lessons learned in UNIDO evaluations
UNIDO, 2016: Independent UNIDO country evaluation: Thailand	• A more effective collaboration between the government of Thailand and UNIDO *(context; target users)* will be more beneficial in developing a "country programme" that identifies the priority areas in which they should work together and then seek funding from potential sources *(success)* than the choice of the projects being driven by UNIDO on the basis of the financial support the latter is able to mobilize *(causal factor; challenge)*.
UNIDO, 2017: Evaluación final independiente del proyecto: Centro de Automatización Industrial y Meca-trónica (Uruguay)	• It is important that UNIDO projects get adequate technical in-house support *(context).* When this capacity is limited to persons that at a later stage get detached from the project the risk emerges *(challenge)* that UNIDO can't adequately met the expectations raised *(causal factor; failure).* UNIDO *(target user)* risks to lose its reputation as a strategic partner in such situations.
UNIDO, 2016: Independent Terminal Evaluation: Demonstration of BAT/BEP in fossil fuel-fired utilities and industrial boilers in response to the Stockholm Convention on POPs	• To UNIDO programme managers *(target users)*: The implementation of this regional project involving six countries *(context)* was very challenging and required more time and better planning to meet deadlines *(challenge).* One important lesson that emerged is that the design should be kept simple. For the same set of objectives, the design should consider to have smaller number of components meaning less administrative burden and more flexibility *(success)* resulting in a better and more successful implementation process (causal factor)*. Lesson learned was amended for this guideline.*
UNIDO, 2016: Independent terminal evaluation. Industrial Energy Efficiency in Ecuador	• To UNIDO country director *(target user)*: Lack of synergies *(challenge)* between energy efficiency projects and Clean Production activities developed by UNIDO at local level *(context)* drives to lose opportunities *(failure)* for a more efficient achievement of shared goals *(causal factor). Lesson learned was amended for this guideline.*

Examples of statements that do not qualify as lessons learned

Statements identified in UNIDO evaluation reports in the lessons learned sections that are in fact no lessons learned
• "Focus on product development innovation methods and tools". *The context, challenge, causal factors, success/failure and target users are omitted. This statement resembles more to a recommendation with suboptimal formulation.*
• "UNIDO, as the International executing Agency, was instrumental in: a) introducing

Statements identified in UNIDO evaluation reports in the lessons learned sections that are in fact no lessons learned
new technologies such as the Valerian System, the use of Zander in tree planting; b) linking environmental preservation to economic development; c) providing support to the HCEFLCD for upgrading its nursery network". *The context, challenge, causal factors, success/failure and target users are omitted. This statement is a finding.*
• "Include in the peer review process also other agencies, such as UNEP and UNDP, which also support countries in the implementation of Enabling Activities and NIP update projects for the Stockholm Convention". *The context, challenge, causal factors, success/failure and target users are omitted. This statement resembles more to a recommendation with suboptimal formulation.*

Lessons learned quality criteria checklist

The evaluator should cite and explain the points below.
✓ **Context** – Explain the context from which the lesson has been derived (e.g. economic, social, political). If possible, point to any relevance to the broader UNIDO mandates or broader technical or regional activities.
✓ **Challenges** – Cite any difficulties, problems or obstacles encountered / solutions found - Positive and negative aspects should be described.
✓ **Causal factors** – Present evidence for "how" or "why" something did or did not work?
✓ **Target users affected by the lessons learned should be cited** (e.g. Management, programme managers, donors or beneficiaries)
✓ **Success or failure** – The lessons learned should cite any decisions, tasks, or processes that constitute reduced or eliminated deficiencies or built successful and sustainable practice and performance; or have the potential of success. Avoid repetition of failure
✓ **The lesson learned is not mistaken for a recommendation or conclusion**

(Source: ILO Evaluation Unit, 2014: Guidance Note 3: Evaluation lessons learned and emerging good practices, amended with UNIDO IEV)

For assessing the quality of evaluation lessons leaner UNIDO uses a 6-point (with one point for each criterion) rating scheme:

Ratings 4-6 are **satisfactory** and **meet quality criteria**.
Ratings 1-3 are **unsatisfactory** and **fail to meet quality criteria**.

The criterion "The lesson learned is not mistaken for a recommendation or conclusion" **is an exclusion criterion**, i.e. when this criterion is met the lesson learned automatically fails the quality check regardless the quality in other criteria.

Annex 7: Rating tables

The following table should be used for rating the different key evaluation criteria:

Evaluation Rating Table

#	Evaluation criteria	Definition	Mandatory rating
A	Progress to impact	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and the extent to which conditions for trajectory change are being put into place.	Yes
B	Project design	Formulation of the intervention, the plan to achieve a specific purpose.	Yes
1	Overall design	Assessment of the design in general.	Yes
2	Logframe	Assessment of the logical framework aimed at planning the intervention.	Yes
C	Project performance	Functioning of a development intervention.	Yes
1	Relevance	The extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor.	Yes
2	Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.	Yes
3	Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.	Yes
4	Sustainability of benefits	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.	Yes
D	Cross-cutting performance criteria	Other important criteria that cut across the UNIDO intervention.	

#	Evaluation criteria	Definition	Mandatory rating
1	Gender mainstreaming	The extent to which UNIDO interventions have contributed to better gender equality and gender related dimensions were considered in an intervention.	Yes
2	M&E	Refers to all the indicators, tools and processes used to measure if a development intervention has been implemented according to the plan (monitoring) and is having the desired result (evaluation).	Yes
3	Results-based management (RBM)	Assessment of issues related to results-based work planning, results based M&E and reporting based on results.	Yes
E	**Performance of partners**	**Assessment of partners' roles and responsibilities engaged in the intervention.**	**Yes**
1	UNIDO	Assessment of the contribution of partners to project design, implementation, monitoring and reporting, supervision and backstopping and evaluation. The performance of each partner will be assessed individually, based on its expected role and responsibilities in the project life cycle.	Yes
2	National counterparts		Yes
3	Donor		Yes
F	**Overall assessment**	**Overarching assessment of the project, drawing upon the analysis made under Project performance and Progress to Impact criteria above but not an average of ratings.**	**Yes**

It is acknowledged that some issues covered by one criterion might overlap with others. Yet to enable UNIDO to learn from the deeper evaluation analyses and lessons on a number of areas, separate criteria are included such as those on Monitoring and Evaluation and Results-Based Management. The consistent use of the criteria pertinent to the evaluation object allow for comparability of UNIDO's performance over time. Evaluation questions are formulated around those evaluation criteria in UNIDO, as specified in the following section.

Rating systems and criteria

UNIDO introduced a six-point rating system for the evaluation criteria in 2015, in line with the practice adopted by other development agencies, including the GEF. The aim of the system is to quantify the judgment of evaluators, identify good and poor practices, to facilitate aggregation within and across projects and enable tracking performance trends over a period. The six-point rating system, with six (6) representing the best and one (1) the worst score, allows for nuanced assessment of performance and results. The same rating scale is used for all rating areas as shown below.

UNIDO evaluation rating scale

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).	

Note: * For impact, the assessment will be based on the level of *likely* achievement, as it is often too early to assess the long-term impacts of the project at the project completion point.

The **table below** contains the formula applied to transform the results of UNIDO's six-point rating scale to the GEF's four-point scale for sustainability[20].

Formula transforming UNIDO ratings into GEF ratings

UNIDO rating	UNIDO rating: sustainability	GEF rating: sustainability
6	Highly likely (HL)	Likely (L)
5	Likely (L)	Moderately Likely (ML)
4	Moderately likely (ML)	Moderately Likely (ML)
3	Moderately Unlikely (MU)	Moderately Unlikely (MU)
2	Unlikely (U)	Moderately Unlikely (MU)
1	Highly unlikely (HU)	Unlikely (U)

This formula underscores the distinction of ratings into "satisfactory" and "unsatisfactory", both in applying UNIDO's six-point rating scale and the transformation into the GEF four-point rating scale for sustainability. To ensure coherence in ratings, the rating is defined above. The use of benchmarks like the performance of peers for the same criteria helps to facilitate the interpretation of ratings.

Project design

Criteria for rating project design are related to the logical framework approach and the quality of overall project design. These criteria include:

Overall design quality

- Pertinence to country priorities, needs of target groups and UNIDO strategies
- Consideration and use of lessons and evaluative evidence from other projects
- Technical feasibility and validity of project design
- Budgeted M&E plan with clear timelines, roles, and responsibilities
- Adequacy of risk assessment (for example financial, sociopolitical, institutional, environmental and implementation aspects)

[20] GEF uses a four-point scale for the criterion of sustainability.

Logframe/logframe-like matrix based on the project's theory of change

- Clarity and logic of results-chain, including impacts, outcomes and outputs
- SMART indicators
- Adequacy of Means of Verification and Assumptions

Implementation performance

Implementation performance criteria correspond broadly to DAC criteria and need to be customized according to the context of the intervention to be evaluated.

- Relevance
- Effectiveness
- Efficiency
- Progress to Impact
- Sustainability of benefits

Partners' performance

UNIDO's projects are characterized by a group of main partners with specific roles and responsibilities. UNIDO itself acts as project implementer and supervisor. Though supplemented by implementation performance criteria listed above, the criteria to assess UNIDO as a partner are more specific and help to address frequent issues in its performance. Governments are local executers, and owners of the project and donors provide project funding. Hence, rating the partners is a key part of UNIDO project evaluations[21]. The six-point rating scale applies[22].

The key issues to be addressed to rate **UNIDO's performance** are:

Project design

- Mobilization of adequate technical expertise for project design
- Inclusiveness of project design (with national counterparts)
- Previous evaluative evidence shaping project design
- Planning for M&E and ensuring sufficient M&E budget

Implementation

- Timely recruitment of project staff
- Project modifications following changes in context or after the Mid-Term Review
- Follow-up to address implementation bottlenecks
- Role of UNIDO country presence (if applicable) supporting the project
- Engagement in policy dialogue to ensure up-scaling of innovations
- Coordination function
- Exit strategy, planned together with the government
- Overall effectiveness of project management as outlined in the Project Document
- Project's governance system

[21] As practiced by the World Bank and the International Fund for Agriculture Development.

[22] 6 = Highly satisfactory; 5 = Satisfactory; 4 = Moderately satisfactory; 3 = Moderately unsatisfactory; 2 = Unsatisfactory; 1 = Highly unsatisfactory

- National management and overall coordination mechanisms
- UNIDO HQ-based management, coordination, monitoring, quality control and technical input

To assess the ***performance of national counterparts***, the evaluation looks into the following issues:

Project design
- Responsiveness to UNIDO's invitation for engagement in designing the project

Implementation
- Ownership of the project
- Financial contributions (cash or in-kind)
- Support to the project, based on actions and policies
- Counterpart funding
- Internal government coordination
- Exit strategy, planned together with UNIDO, or arrangements for continued funding of certain activities
- Facilitation of the participation of Non-Governmental Organizations (NGOs), civil society and the private sector where appropriate
- Suitable procurement procedures for timely project implementation
- Engagement with UNIDO in policy dialogue to promote the up-scaling or replication of innovations

For the assessment of ***donor performance***, the following issues require ratings:

- Timely disbursement of project funds
- Feedback to progress reports, including Mid-Term Evaluation, if applicable
- Support by the donor's country presence (if applicable) supporting the project for example through engagement in policy dialogue

Gender mainstreaming

The UNIDO Policy on gender equality and the empowerment of women, issued initially in April 2009, and revised in March 2015 (UNIDO/DGB/(M).110/Rev.), 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. It commits the organization that evaluations will demonstrate effective use of the UNEG guidance on evaluating from a human rights and gender equality perspective, as indicated by the Organization's meta-evaluation scores according to the UNEG Evaluation Scorecard.

In line with the UNIDO Gender Equality and Empowerment of Women Strategy, 2016-2019, all UNIDO technical assistance projects post-2015 are to be assigned a gender marker and should go through a gender mainstreaming check-list before approval. UNIDO's gender marker is in line with UN System-wide action plan (SWAP) requirements, with four categories: 0 — no attention to gender, 1 — some/limited

attention to gender, 2a — significant attention to gender, 2b — gender is the principal objective[23].

Besides, Guides on Gender Mainstreaming for Inclusive and Sustainable Industrial Development (ISID) Projects in different areas of UNIDO's work have been developed and published during 2015[24], which have specific guidance on suitable outputs/activities/ indicators per technical area.

If the project design and gender analysis/existing indicators are not sufficient to allow for an accurate appraisal at the final evaluation, specific indicators could be created during the evaluation planning stage (preparing and revising the inception report) and assessed during the evaluation process. Together with the budget, the time required to adequately carry out a gender responsive evaluation will need to be taken into account. The evaluation time depends on the questions the assessment needs to answer, on how deep the analyses are requested to be, and on financial and human resources available as well as other external factors.

For terminal evaluations of projects that have been approved after 2015, evaluations should assess if the rating was correctly done at entry, if appropriate outputs/activities/indicators and monitoring were put in place during implementation and what results can be actually observed at the time of terminal evaluation (in line with UNIDO's organizational results reporting to SWAP). The Gender Mainstreaming six-point rating scale should then be used accordingly.

For projects that have **2a** or **2b ratings** at project design/entry at least one evaluation team member should have demonstrated/significant experience in evaluating GEEW projects. For other projects, evaluators are encouraged to further familiarize themselves with the key gender aspects and impacts of UNIDO projects, both through the foundation modules of "I know Gender" online course of UN Women and the UNIDO's Guides on Gender Mainstreaming ISID Projects.

[i] Wherever possible, the project will apply gender disaggregated indicators and evaluations.
[ii] The suitability for verification purposes is subject to confidentiality clauses which are yet to be determined in close consultation with the stakeholders involved.

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http://intranet.unido.org/intra/Gender_Mainstreaming_Tools_and_Guides