

**Independent Thematic Evaluation**  
**UNIDO's Contribution to the**  
**Millennium Development Goals**



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

**UNIDO EVALUATION GROUP**

**Independent Thematic Evaluation**

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Millennium Development  
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# Abbreviations and Acronyms

3ADI	African Agri-business and Agro-industries Development Initiative
AfDB	African Development Bank
CFC	Chlorofluorocarbon
CND	Cluster and networking development
CP	Cleaner production
DaO	Delivering as One
DCED	Donor Committee on Enterprise Development
ECP	Entrepreneurship Curriculum Programme
FAO	Food and Agriculture Organization
GC	General Conference
HCFC	Hydrochlorofluorocarbon
IFAD	International Fund for Agricultural Development
ITC	International Technology Centre
LDC	Least Developed Country
MDG	Millennium Development Goal
MP	Montreal Protocol
MTPF	Medium-Term Programme Framework
NCPC	National cleaner production centres
NIP	National implementation plan (for POPs)
ODA	Official Development Assistance
ODG/EVA	Office of the Director-General / Evaluation Group
ODP	Ozone-depleting potential
ODS	Ozone-depleting substances
PB	Programme and Budgets
POPs	Persistent Organic Pollutants
RBM	Results-based management
RECP	Resource-efficient and cleaner production
SHP	Small hydro power
SMTQ	Standardizations, metrology, testing, and quality
TEST	Transboundary environmentally sustainable technology
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDG	United Nations Development Group
UNEP	United Nations Environment Programme
WED	Women Entrepreneurship Development

## Glossary of Evaluation Terms

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the objectives of a development intervention were or are expected to be achieved.
Efficiency	A measure of how economically inputs (through activities) are converted into outputs.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Intervention	An external action to assist a national effort to achieve specific development goals.
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances.
Logframe (logical framework approach)	Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives) also called RBM (results based management) principles.
Outcomes	The achieved or likely effects of an intervention's outputs.
Outputs	The products in terms of physical and human capacities that result from an intervention.
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.



# Executive summary

## *The Millennium Development Goals and UNIDO*

In 2000, United Nations (UN) member countries came together in adopting the Millennium Development Declaration leading to the Millennium Development Goals (MDGs). Subsequently, at the 2003 General Conference, UNIDO's Member States gave UNIDO a mandate to pursue the MDGs. Since then, UNIDO has incorporated the MDGs into its policy documents. Through its activities and within the thematic priorities, UNIDO seeks to contribute to four out of the eight MDGs, namely:

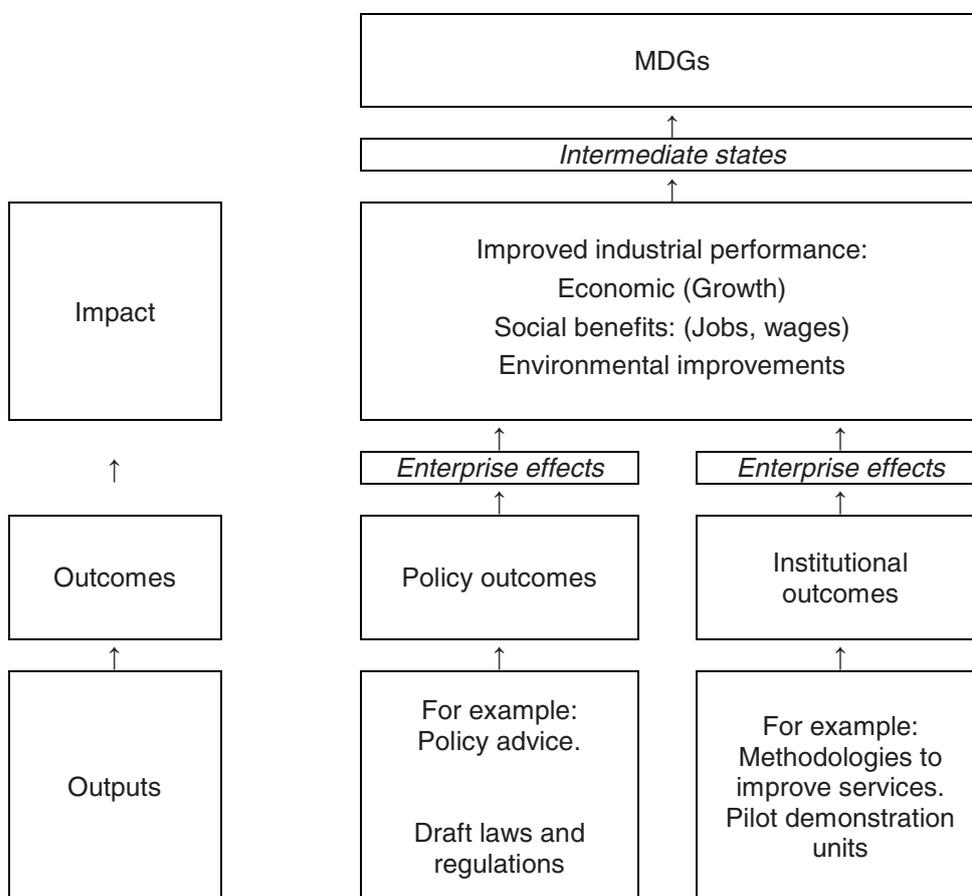
- MDG 1: Eradicate extreme poverty and hunger
- MDG 3: Promote gender equality and empower women
- MDG 7: Ensure environmental sustainability
- MDG 8: Develop a global partnership for development.

## *Purpose and methodology*

The purpose of this review was to assess to what extent UNIDO technical cooperation projects had contributed to the MDGs or have the potential to do so, using UNIDO independent evaluations as an entry point. The review was conducted in 2012 by an independent consultant Ms. Jette Jensen.

Many recent evaluations have found UNIDO projects to be highly relevant for achieving the MDGs; however, the linkages between these projects and national MDGs were not always clear. To this end, the review identified and analyzed the typical underlying intervention logics using findings of 26 country, thematic and project evaluation reports and comparing them with a generic intervention logic derived from the UNIDO Programme and Budgets, as shown in Figure A below. In doing so, the review also assessed the compatibility between project indicators and MDG indicators, and identified impact drivers leading to the MDGs.

Figure A: Generic UNIDO intervention logic



**Findings on MDG 1: Eradicate extreme poverty and hunger**

The thematic review indicated that UNIDO projects implemented under Programmes C.1 ‘Poverty reduction through productive activities’ and C.2 ‘Trade capacity building’ are likely to contribute to MDG 1, Target B Achieve full, productive employment and decent work for all, including women and youth. The review found, however, only a few quantified project contributions to job creation or to target beneficiaries living above the national poverty line as a consequence of a UNIDO project. Exceptions were projects for post-crisis training and entrepreneurship curriculum development. Many evaluation reports contained examples of plausible links between project outcomes and the preservation and/or expansion of employment in manufacturing sectors - in some cases referring to thousands of jobs, but the exact number could not be verified. Yet, other evaluation reports described anecdotal and unsystematic links between successful project outcomes and employment generation based on the judgement of counterparts or associated government officials. Many projects

reportedly had vast potential for future contributions to employment generation. In addition, the review identified contributions to employment creation or preservation from some environment projects.

Initiatives under way to improve pro-poor targeting were also identified. For example, the Cluster and Business Linkages Unit had developed extensive tools and methodologies, including a comprehensive monitoring framework for use in project planning and monitoring. Also the Agri-business and Rural Entrepreneurship Development Branch had sought to increase project impact through its value-chain approach.

### ***Findings on MDG 3: Promote gender equality and empower women***

Many UNIDO projects have the potential to contribute to MDG 3, Indicator 2: Share of women in wage employment in the non-agricultural sector. However, little evidence could be found of this effect in the evaluation reports. Typical UNIDO women entrepreneurship development projects contributed to MDG 1, Indicator 7 Proportion of 'own-account' (entrepreneurs) in total employment. Many other projects included women in the target group, but due to a general lack of gender mainstreaming or gender disaggregation of data, it was not possible to assess their effects on wage employment for women. There might have been unrecorded positive (or negative) effects. The garment sector in Sri Lanka was a positive case in point.

### ***Findings on contributions to MDG 7: Ensure environmental sustainability***

The review found a high degree of alignment between UNIDO's programme C. 3. Environment and Energy and MDG 7, particularly MDG 7, Target A: 'Integrate the principles of sustainable development into country policies and country programmes' and related indicators. UNIDO projects were found to have contributed to national sustainable energy plans, ozone depleting substances (ODS) phase-out policies, national implementation plans for persistent organic pollutants (POPs) and a range of other environmental policies, strategies and plans.

Also with respect to the implementation of environmental policies, many examples of UNIDO contributions were demonstrated: Notably, UNIDO projects resulted in decreased consumption of ozone depleting substances (ODS) (MDG Indicator 7.3). These results could be quantified at national levels and compared with country targets. By the end of 2011, UNIDO projects had accounted for 16 per cent of all developing country ODS phase-out. Furthermore, many projects contributed to reduced CO<sub>2</sub> emissions (Indicator 7.2). However, contributions were often quantified at the enterprise level and aggregation across enterprises

was a challenge. Similarly, with respect to water consumption (Indicator 7.5) where reduction in water use was mostly reported at enterprise level as one among several indicators related to resource-efficient and cleaner production. The project indicator would be compatible with the MDG indicator if enterprise-level reductions had been aggregated at national levels.

Monitoring of results was found to be very systematic in Montreal Protocol projects mainly due to the compliance requirements and less systematic in other projects, possibly causing under-reporting of MDG 7 contributions.

### ***Findings on MDG 8: Develop a global partnership for development***

MDG 8 is primarily dedicated to the actions and commitments of developed countries. It was found plausible that UNIDO promotes the channelling of more aid to LDCs (*MDG 8 Target C*). The ongoing project to strengthen local manufacturing of essential drugs, once completed, could, moreover, contribute to better access to affordable drugs (*MDG 8 Target E*). The UNIDO Technology Centres were found to have modest effects on making the benefits of new technologies available to developing countries (*MDG 8 Target F*).

### ***Findings on reporting on the MDGs***

UNIDO has reported on its contribution to the MDGs to its governing bodies and in the Annual Reports, mainly referring to examples of projects. A few environment projects had been featured in a UN Website and publication showcasing good MDG practices. Overall the UNIDO-related MDG reporting was not very visible and contributions could have been under-reported.

### ***Findings on challenges***

The project intervention logics were found to be complex, following different pathways through policy advice, support to institutions and working directly with enterprises, often with multiple counterparts. The time lag from project outputs to ultimate impact on a national MDG could span over several years, even decades. The project intervention logic was often intertwined with a UN Development Assistance Framework (UNDAF) or other national frameworks, thereby ensuring project relevance and merging project results with other higher level country results, but making UNIDO project results harder to track.

The review revealed that many factors were considered important for achieving ultimate impact, and it was not always possible to separate impact drivers from assumptions and other factors. Depending on the project context and the project boundaries some factors might fall within the sphere of influence of the project, and some may even act as a pre-requisite or determinant for the project strategy.

Missed opportunities in scaling up of successful pilot demonstrations were also found to curb contributions to the MDGs. In this regard, integrating pilot findings into government policies and cost savings were considered important impact drivers to amplify benefits derived from pilot projects.

**In general, the lack of project monitoring systems** and associated results data were found to hinder the identification and measurement of projects' MDG contributions. Such systems would lay the foundation for data collection and feed into national MDG monitoring systems. Three projects were identified that supported such national monitoring systems, namely two related to national industrial performance, including employment, and one related to national CO<sub>2</sub> emissions. Considering UNIDO's mandate in manufacturing statistics UNIDO has the potential to support many such systems.

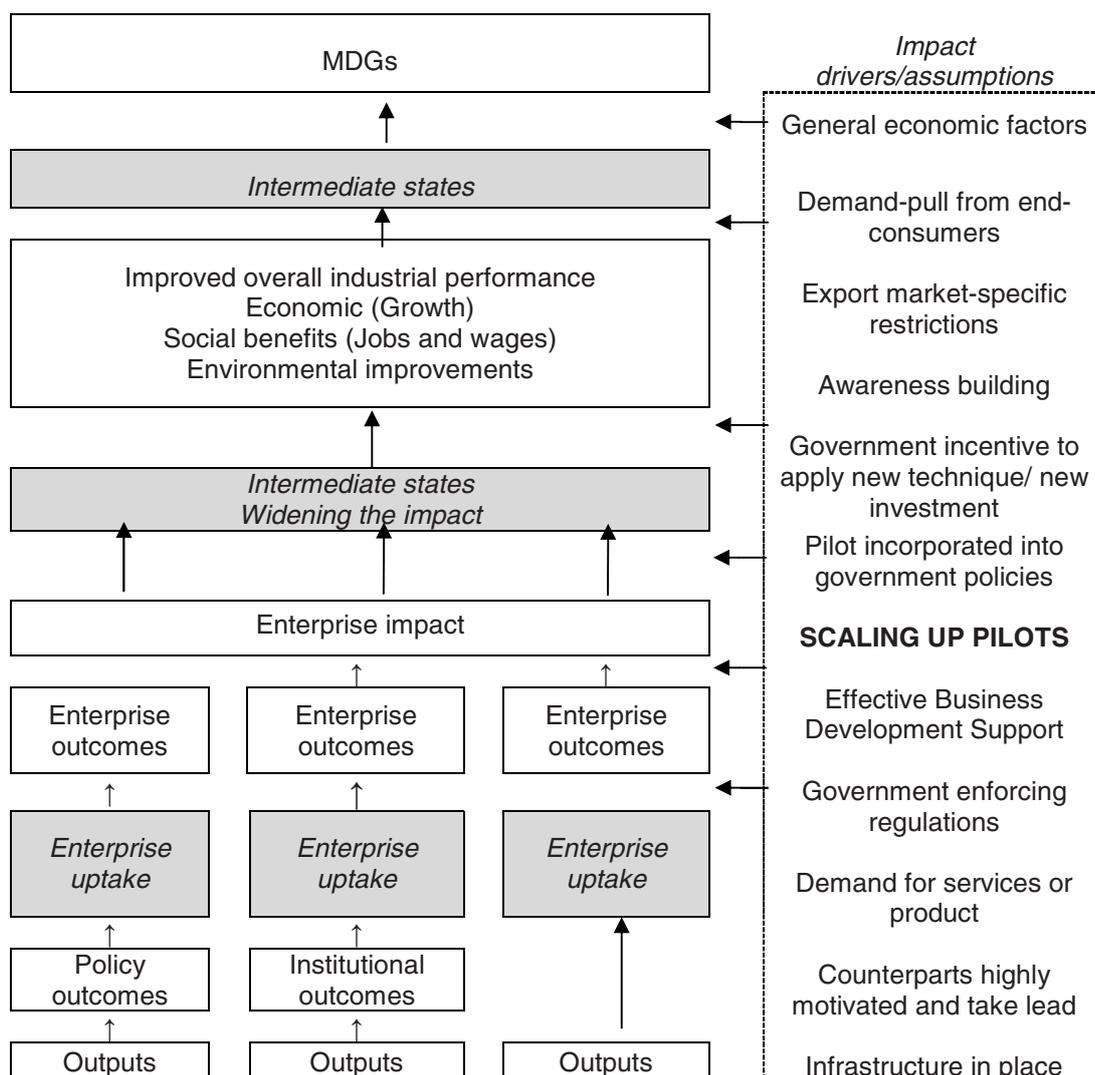
Finally, it was noted that the 'Guidelines for the Technical Cooperation Programme and Project Cycle' referred to the MDGs in general terms but did not specifically suggest how the MDGs could be part of the project design. This may have led to project managers regarding implicit relevance for the MDGs as sufficient.

### **Conclusion**

The review confirmed that UNIDO's programme components and the intended intervention logics for projects implemented under the thematic priorities are, in principle, aligned to the MDGs. Policy documents, notably the PB referred to MDGs without reference to the relevant and specific MDG targets and indicators. The alignment was only reached several years after the 2003 GC resolution on UNIDO's role in achieving the MGDs, and, in practice, it proved difficult to match UNIDO priorities and results frameworks with the MDGs and the relevant MDG targets. Overall, the review found **little evidence of systematically measured and reported MDG contributions**. Most of the actual and potential contributions were concentrated to MDG 1 and MDG 7.

In view of the fact that many UNIDO projects play a catalytic role in supporting government strategies and plans, the review arrived at an expanded generic intervention logic as depicted in Figure B, which includes the intermediate stages between outputs, outcomes and impact. It also includes the most frequently mentioned assumptions or impact drivers. The expanded intervention logic shows that a clear picture of the intermediate stages and the associated assumptions and impact drivers is essential for conceiving a project *impact* strategy, designing a clear project logframe and for results-oriented implementation.

Figure B: Expanded generic UNIDO intervention logic



The **lack of data on project results** was found to be a major impediment to identify and measure MDG contributions. The review found that many indicators were not compatible with MDG indicators (except for MDG 7), but in almost all cases there was scope for defining and including such indicators at the outcome and impact levels. At the same time, there was a **lack of project monitoring systems** at the outcome and/or impact level, and project monitoring systems that could feed into national results frameworks. The lack of ability to measure and track results could lead to **UNIDO contributions to the MDG being under-reported**.

Recognizing that impact often occurs with long time lag, project monitoring systems will not always capture post-project results and no mechanisms were

identified for reporting back to UNIDO on results attained after project closure. Therefore, to better understand the linkages between project outputs and contributions to the national MDG, post-project surveys, research or impact evaluations would be required. Such analyses would also help demonstrating evidence of UNIDO MDG contributions and improving reporting.

***Key Recommendations:***

In order for UNIDO's technical cooperation to make visible and trackable contributions to the MDGs or to post-2015 development goals, the following actions are recommended:

- UNIDO should integrate the relevant MDG or post 2015 goals at all levels of planning, implementation and monitoring of technical cooperation, starting from the PB programme structure by making reference to specific MDG (or post 2015 goals) targets and indicators.
- Relevant MDGs or post-2015 goals, targets and related indicators should be integrated in logical frameworks of projects and programmes. UNIDO must be prepared to work with long intervention logics, define impact indicators that are MDG compatible, and design adequate project monitoring systems that feed into national MDG monitoring systems.
- In some cases, additional research, post project analyses and surveys should be undertaken to clarify the linkages between UNIDO projects and national MDGs or other development goals of partner countries. Such analyses would also help measure and report on actual contributions to the achievement of national objectives, and make UNIDO contributions more visible than they are today.
- The Evaluation Group should in its forthcoming work programme include a MDG-related impact evaluation and it is recommended that this is done in relation to MDG 7.
- With respect to the post-2015 development goals or similar international results framework, UNIDO should engage early in the process and advocate in favour of addressing challenges identified in areas of UNIDO's mandate. Once defined, UNIDO should integrate the post-2015 development goals, targets and indicators into its own results framework without delay.

The recommendations chapter (5.1) offers a set of specific recommendations at the project, programme component and strategic levels.



# 1. Introduction and background

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## 1.1 The Millennium Development Goals

In 2000, 189 United Nations (UN) Member States adopted the Millennium Declaration, reflecting their aspirations for the new century. The Millennium Declaration commits to objectives in wide-ranging areas – from peace and security, development and poverty eradication, protecting the environment, to strengthening the United Nations.<sup>1</sup> In order to operationalize the Declaration, the UN Secretary-General, in 2001, presented the ‘Road map towards the Implementation of the United Nations Millennium Declaration’, providing guidance for each objective and defining the eight Millennium Development Goals (MDGs). These MDGs are listed in Box 1.1 below.<sup>2</sup> The Road map also advocated for the MDGs to become national development goals and called for increased focus on the poorest and most vulnerable.<sup>3</sup> It also emphasized that the MDGs are mutually supportive. The MDGs were accompanied by specific targets and indicators as presented in Annex 1.<sup>4</sup> This feature allows progress to be measured and monitored which is in line with the introduction of results-based management (RBM) principles in development cooperation.<sup>5</sup> To this end, the UN Development Group later issued definitions on the indicators and a methodology for compiling and monitoring them.<sup>6</sup> The MDGs are unique in that one goal – MDG 8 – is dedicated solely to the actions of developed countries.

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<sup>1</sup> United Nations General Assembly, Resolution 55/2. *United Nations Millennium Declaration* (A/RES/55/2) adopted 8 September 2000.

<sup>2</sup> United Nations General Assembly (2001). *Road map towards the implementation of the United Nations Millennium Declaration* (A/56/326), paragraph 80ff, and Annex.

<sup>3</sup> Ibid paragraphs 81 and 82, page 19.

<sup>4</sup> The Annex contains the current targets and indicators, effective 15 January 2008, as a few indicators were updated at the 2005 Summit and adopted at the 2007 General Assembly, (General Assembly Resolution/60/1).

<sup>5</sup> See for instance OECD-DAC working party on aid evaluation, ‘*RBM in the development cooperation agencies, a review of experience*’, 2000.

<sup>6</sup> United Nations Development Group, *Indicators for Monitoring the Millennium Development Goals, Definitions, Rationale, Concepts and Sources*, issued 2003.

### Box 1.1: The Millennium Development Goals

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria, and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

The MDGs have since been at the core of UN development cooperation, although initially there was some hesitation as to how to incorporate the MDGs into agency strategies and at the national level. For instance, UNIDO – like most UN organizations – had aligned its activities to previous declarations on international development goals, such as environmentally sustainable (industrial) development, prompting a need to redefine higher level objectives. At the national level, many governments had introduced Poverty Reduction Strategies that needed readjustment to the MDGs. The UN Development Group launched several initiatives, such as the Millennium Campaign; the Millennium Project, – a research project headed by Jeffrey Sachs; and a number of task forces, some of which UNIDO participated in.<sup>7</sup> Over the years, the MDGs became the overarching results framework – if not the main goals – for the majority of development agencies. In parallel, developing countries started to define their own national MDGs. As such, there are national MDGs in addition to the original global MDGs.

Other developments equally shaped the context in which UNIDO (and other development agencies) internalized the MDGs and began to deliver aid accordingly – namely, the Doha Round initiated in 2001, aiming at free trade; the Monterey Conference in 2002, leading to an increase in official development assistance (ODA); and the Paris Declaration in 2005, advocating aid recipient country ownership, donor alignment, in-country harmonization, clear results, and mutual accountability for results.

The first major assessment of MDG achievements took place at the 2005 Summit. By that time, Jeffrey Sachs' Millennium Project also delivered its report, containing blueprints for achieving the MDGs from every imaginable aspect, and arguing for global participation. Voices of sceptics have also been heard arguing

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<sup>7</sup> UNIDO Annual Report, 2002, page 3.

that utopian goals are not just harmless inspirational rhetoric, but mean that aid workers focus efforts on infeasible tasks instead of feasible tasks that will do some good.<sup>8</sup> Whereas others – less sceptical – debated over whether the MDGs are too ambitious and should be regarded more as an aspirational point of reference rather than actual targets; and likewise whether the targets and indicators were technically sound. The absence of goals related to productive sectors, economic growth and energy has also been highlighted.

## 1.2 UNIDO and the MDGs

Intuitively, UNIDO's projects for the development of small and medium-scale enterprises, product quality and not least environmental projects seemed critical for achieving the MDGs. Accordingly, by 2003, UNIDO identified the MDGs relevant to its work, namely MDG 1, MDG 3, MDG 7, and MDG 8.<sup>9</sup> To better delineate its role, in conjunction with the 2003 General Conference (GC), UNIDO hosted an Industrial Development Forum on 'the role of industrial development in achieving the MDGs'.<sup>10</sup> The forum drew on the expertise of more than 30 participants including a president, ministers and senior officials of member states as well as experts including Jeffrey Sachs, who underscored the importance of 'productivity transformation' naming it UNIDO's speciality.<sup>11</sup> Subsequently, UNIDO member states adopted the resolution 'Role of UNIDO in achieving the Millennium Development Goals', officially mandating UNIDO to pursue the MDGs.<sup>12</sup> The Resolution is attached as Annex 2.

The resolution referred to a broad range of areas without mentioning specific MDGs. Hence, to further conceptualize its contribution to the MDGs, UNIDO initiated several research efforts, including the following ones: (1) a three-year research programme called 'Combatting Marginalization and Poverty Reduction through Industrial Development' (or COMPID), (2) a special issue of the Industrial Development Report, (2004-2005), which was devoted to 'Industry, environment and the MDGs in sub-Saharan Africa: The new frontier of poverty', and (3) a 'strategic map', which featured the MDGs and national priorities as the primary sources for UNIDO learning and innovation.<sup>13</sup>

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<sup>8</sup> William Easterly, (2006), 'The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good', page 20.

<sup>9</sup> UNIDO Annual Report, 2003; page 3 on MDG 1; page 18 on Integrated Programmes; and page 31 on 'MDG 3, 'A pathway out of poverty'.

<sup>10</sup> 'The role of industrial development in achieving the MDGs. Proceeding of the industrial development forum and associated round tables, 1-3 December, 2003', page 45.

<sup>11</sup> Ibid page 45.

<sup>12</sup> GC10/Res 3: 'Role of UNIDO in achieving the Millennium Development Goals', December 2003.

<sup>13</sup> Annual report, 2003, pages 15, 48, and 54.

Over the coming years, UNIDO was to incorporate MDGs 1, 3, 7, and 8 into its strategic vision, the medium-term programme framework (MTPF), and the programme and budgets (PB) providing the policy framework for adopting the MDGs as the overarching development objective for technical cooperation.

### **1.3 Context and purpose of the review**

The purpose of this independent review was to assess to what extent UNIDO's technical cooperation activities have contributed to the achievement of the MDGs or have the potential to do so. Many country evaluations conducted by ODG/EVA since 2010 found UNIDO projects to be highly relevant for achieving countries' MDGs and to have a potential for contributing to the MDGs. However, the linkages between the projects and the MDGs were not always clear.

This review sought to examine the causal relationship between projects and the MDGs by identifying the underlying intervention logic and analyzing whether it is/was likely to lead to the MDGs. In doing so, the review also compared the UNIDO project indicators with the MDG indicators to ascertain compatibility. The review also sought to assess to what extent contributions to the MDGs have been measured, and reported on, and possibly, to provide recommendations on how this can be done.

The review was mainly a meta evaluation of findings coming out of country and thematic evaluations conducted by ODG/EVA during 2010 and 2011, complemented by interviews at UNIDO Headquarters, a literature review, and a forward looking analysis of the findings and their implications for UNIDO.

As a starting point, the review verified the intended links between UNIDO programme components and the MDGs by comparing the UNIDO programmatic results matrix, as presented in the MTPF, with the MDG targets and indicators. Next, it identified the general intervention logic for UNIDO projects based on the programme structure of the PB. This general intervention logic served as a reference point for analyzing contributions to the MDGs of projects falling within each programme component, using the findings and intervention logics of the evaluations. Chapter 2 describes the methodology in more detail.

Chapter 3 presents the findings for the four MDGs relating to UNIDO's mission, namely, MDG 1 - Eradicate extreme poverty and hunger, MDG 3 - Promote gender equality and empower women, MDG 7 - Ensure environmental sustainability and MDG 8 - Develop a global partnership for development. For each MDG, the findings are organized according to UNIDO programme components, covering as many UNIDO programme components as possible. The

reporting on the MDGs is covered in section 3.5 and the major challenges are summarized in section 3.6 before some conclusions and recommendations are offered in Chapters 4 and 5, respectively.

The review was undertaken by Ms. Jette Jensen, International Evaluation Consultant, and took place between December 2011 and June 2012.

## **1.4 How are the MDGs incorporated into UNIDO's strategic or policy documents?**

### **(a) Strategic long-term vision**

In its strategic long-term vision (2005-2015) UNIDO defined its response to major trends and challenges including poverty, globalization and environmental sustainability and recognized the MDGs as the most important international development goals. Its services were organized in three thematic priority areas, namely (a) poverty alleviation through productive non-farm activities; (b) trade capacity building; and (c) environment and energy, broadly corresponding to the challenges and the MDGs.<sup>14</sup>

### **(b) Medium-Term Programme Framework (MPTF)**

The MPTF 2006-2009 confirmed the MDGs as the most important international goals in determining UNIDO's overall programmatic objectives and priorities.<sup>15</sup> The next MPTF 2010-2013 presented a complete programme framework and made more explicit reference to the MDGs with (a) poverty eradication through productive activities, contributing to MDGs 1 and 3; (b) trade capacity building, contributing to MDGs 1, 3, and 8; and (c) environment and energy, contributing to MDG 7.<sup>16</sup> Finally, UNIDO has flagged a contribution to MDG 6: Combat HIV/AIDS, malaria and other diseases, through certain projects.<sup>17</sup>

Against this background, UNIDO's intended contribution to the MDGs can be illustrated in Figure 1.1 below, showing the thematic priorities and their respective programme components.<sup>18</sup>

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<sup>14</sup> GC11/8 (IDB30/23): Long-Term Strategic Vision. May 2005, paragraphs 7-15 and 22-40, and Vision statement in document Annex.

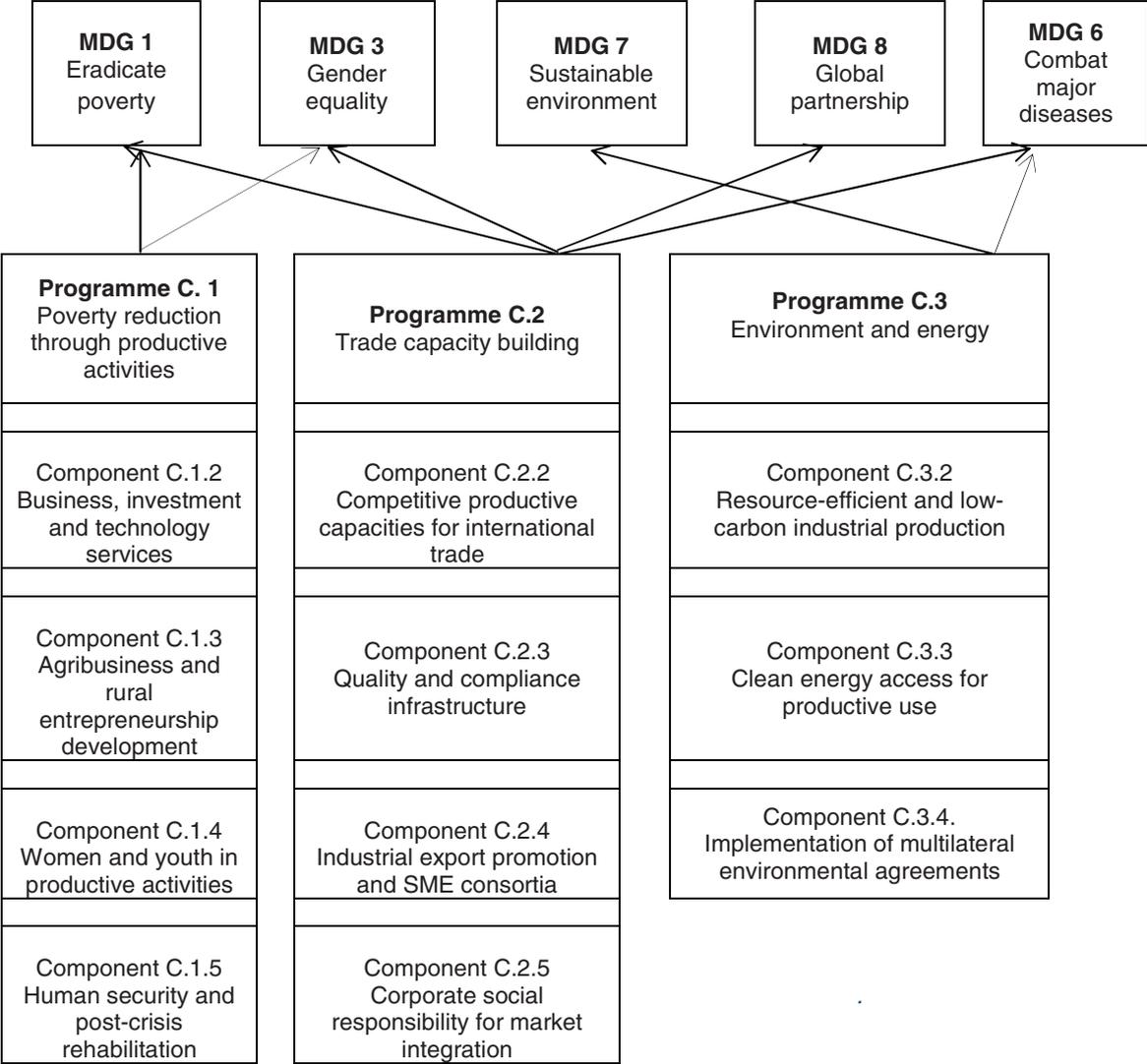
<sup>15</sup> Medium-Term Programme Framework, (MPTF), 2006-2009, Document GC.11/12, paragraph 5, page 2.

<sup>16</sup> MPTF 2010-2013, Document IDB.35/8/Add1, Overview on page 6 and paragraphs 60, 63, and 95.

<sup>17</sup> UNIDO contributions to achieving the MDGs, Document IDB.38/14, 23 September 2010, paragraph 24, page 7.

<sup>18</sup> The reference numbers are those of the PB 2012-2013, where the thematic priorities correspond to major programme C, including the three programmes shown and their programme components.

Figure 1.1: Intended contribution of UNIDO programme components to the MDGs



This figure illustrates that UNIDO has incorporated the MDGs, in principle, into its policy documents, and which programme components are expected to contribute to various MDGs, and that an array of contributions are intended.

Furthermore, the MTPF 2010-2013 provided a programmatic results matrix that defined expected impact, and desired policy and institutional outcomes for each thematic priority area at the regional and country level. These were complemented by performance indicators both at the impact and outcomes levels.<sup>19</sup> The results matrix is reproduced in Annex 3 for easy reference.

The programme components for direction and results-based management are not included. Document IDB.39.13/Rev1, 2 June 2011. Henceforth referred to as PB 2012-2013.

<sup>19</sup> MTPF 2010-2013, page 19

In order to understand how well the expected UNIDO country-level impact matches with the MDGs, a detailed comparison was performed, as part of this review, between established MDG targets and indicators and the corresponding UNIDO expected impact statements and performance indicators. The comparison, provided in Annex 4, confirmed the broad intention to contribute to the MDGs, but revealed that in practice, it was difficult to match UNIDO priorities and definitions to MDG targets and indicators.

It should also be considered that this level of alignment was achieved only in 2009-2010 with the issuance of the MTPF 2010-2013, six years after the 2003 GC MDG Resolution. In 2009, UNIDO also announced that, along with other UN agencies, it would begin to produce some new or reformulated MDG targets and indicators that could capture systematically contributions of the productive sectors, for consideration at the 2010 High-level MDG Review Conference.<sup>20</sup>

(c) Programme and Budget structure and general intervention logic

As UNIDO's intention to contribute to the MDGs is confirmed in the strategic long-term vision and the MTPFs, the next question is how was the contribution expected to take place? Or, what is the underlying theory of change on how UNIDO project outcomes and expected impact will contribute to the MDGs? On the basis of the programme structure described in the MTPF 2010-2013 and as further elaborated in the PB 2012-2013, a generic intervention logic can be derived as shown in Figure 1.2.<sup>21</sup>

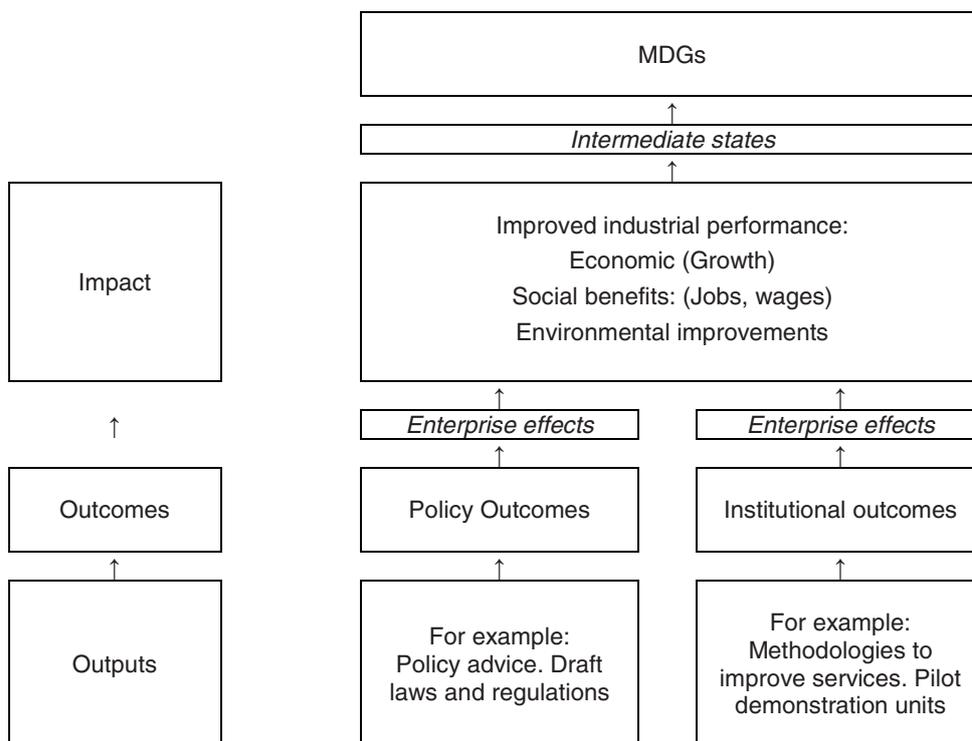
The programme structure is similar for all programme components, namely, that the component generates country-level policy and/or organizational outcomes, which in turn contribute to an expected impact. The impact may in turn contribute to a MDG. As there may not be a direct relationship between the outcome and the impact and subsequently the MDG, the intervention logic includes a number of intermediate states.

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<sup>20</sup> UNIDO as part of the UN Chief Executives Board Inter-agency Cluster as reported in 'UNIDO initiative on the MDGs.' Document IDB.36/16, 13 May 2009.

<sup>21</sup> Adopted from UNIDO/EVA unpublished Power-Point presentation entitled: 'RBM Crash Course,' slide 6.

Figure 1.2: Generic UNIDO intervention logic



This generic intervention logic constituted the underlying intervention logic for analyzing UNIDO's contribution to MDGs.

UNIDO has a strong technical cooperation culture based on specialized expertise and long experience. Standing by its promise to deliver results at the country level, UNIDO describes, in great detail, in the PB the expected country outcomes and impact of projects implemented under each programme component. This description, however, may lead to misinterpretation; it is not UNIDO that achieves or contributes directly to the MDGs; it is the national counterpart institution. In line with the Paris Declaration on Aid Effectiveness, UNIDO provides technical cooperation within national development frameworks, and supports national authorities in their development efforts. Thus UNIDO contributes indirectly to the national MDGs.

(d) Programming

The requirement that projects should aim to contribute towards MDGs is reflected in the 'Guidelines on technical cooperation projects', which mentions that programming efforts should be compatible with national development efforts and policies, in particular the poverty reduction strategy and the MDG targets and

indicators.<sup>22</sup> To this effect, UNIDO also participates in UNDAF and the UN 'Delivering as One' (DaO), which are both assumed to be in alignment with national MDGs. Finally, UNIDO is one of the executing agencies for the MDG-Fund.

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<sup>22</sup> UNIDO (2006), Guidelines on technical cooperation programmes and projects, step IP 01.05.00 Approach, page 22.



## **2.**

# **Methodology**

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### **2.1 Scope and focus**

In view of UNIDO's ongoing work in the areas of poverty reduction inclusive of globalization and sustainable environment, which relate to the MDGs, the Evaluation Group (ODG/EVA) included an independent thematic review of UNIDO's contribution to the MDGs in its work programme. The approach paper in Annex 5 describes the scope, focus, approach, and methodology to be applied.

The review focused on MDG 1, MDG 3, MDG 7, and MDG 8, which UNIDO had identified as relevant to its work. Within UNIDO's work, the review focused on technical cooperation activities (as opposed to the global forum activities) using evaluation findings as its primary source of information. Starting in 2010, ODG/EVA included, in the terms of reference of all thematic and country evaluations, an assessment of the extent to which the programmes contributed to the MDGs. This review synthesizes relevant information stemming from country and thematic evaluations conducted during 2010 and 2011. For better coverage of UNIDO programme components, some thematic evaluations conducted before 2010 are also included. In addition, the review examined a few project evaluations that cover certain UNIDO programme components, geographical regions or that dig deeper into project-specific issues.

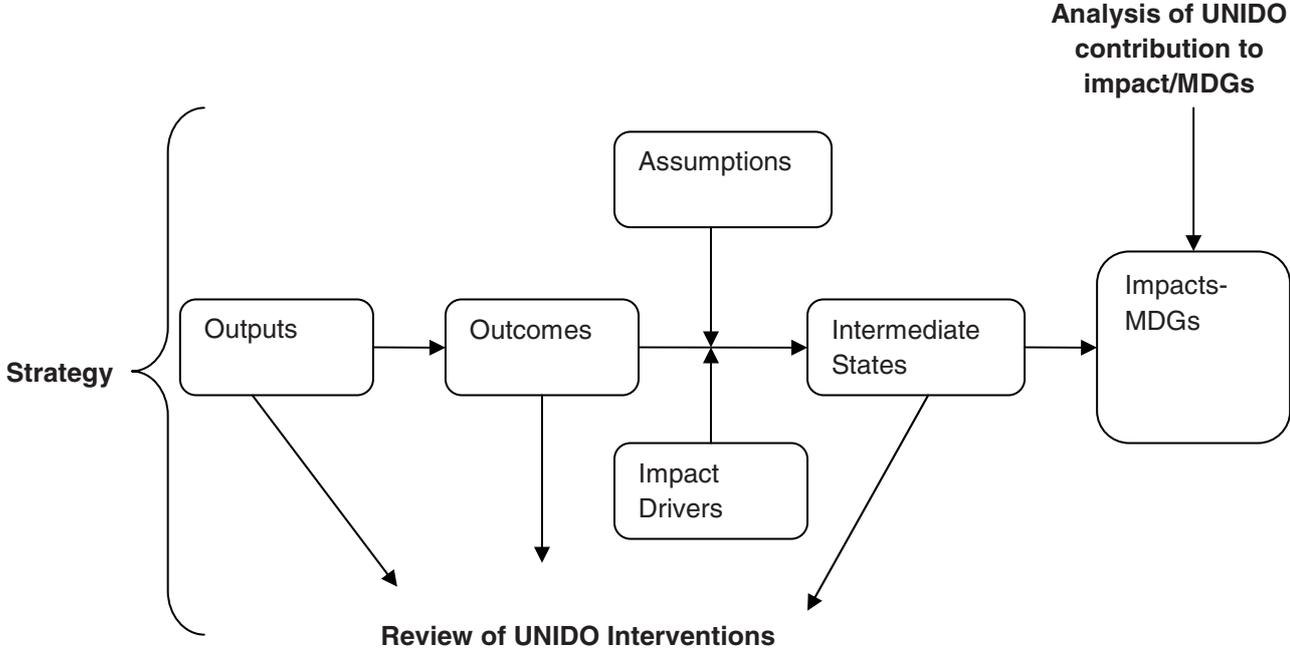
The 26 evaluation reports reviewed are listed in Annex 6 and mapped according to UNIDO programme components in Annex 7.

### **2.2 Approach**

The review uses a theory of change approach, seeking to identify the underlying intervention logics for UNIDO projects leading to the MDGs. A project's theory of change is a description of how an intervention is expected to deliver the desired results. The project strategy typically explains the project theory of change, including a process theory or implementation theory on how inputs will be transformed into outputs and outputs into outcomes and an impact theory or programmatic theory on how and by which mechanism the project will contribute to an impact. As this review aims to validate ultimate project impact, the focus is

on the impact theory. A project’s underlying theory of change is also referred to as the intervention logic.<sup>23</sup> An overview of the approach is featured in Figure 2.1.

Figure 2.1: Generic intervention logic or results chain



An evaluation using the theory of change approach assesses the links between the states of the logic; if validated, the impact is likely to occur, whereas a break in the logic would signify that the next steps are less or not likely to occur. As this review, in principle, was a meta evaluation, it relied on intervention logics presented in evaluation reports, and where feasible and needed, attempted to reconstruct such intervention logics based on available information.

The generic intervention logic above shows a simple intervention, with consecutive steps from output to impact. In practice, some intervention logics may be longer, some may be more complicated, and others both. Longer intervention logics entail more intermediate steps from project outcome to impact and in this case to the MDGs, and more external factors may influence the

<sup>23</sup> The use of terminology for these concepts varies slightly within the literature on theory-based evaluation and logical models. See Approach Paper (page 4), Carol H. Weiss (2007), page 68 or Lilit Melikyan for UNIDO, (2008), Developing a methodology for impact evaluation at UNIDO, page 26. The review takes a pragmatic practical approach.

contribution. More complicated intervention logics include multiple and different strands of interventions, for example, involving multiple agencies, multidisciplinary approaches or working in different locations, each within a different context.<sup>24</sup>

If one compares the UNIDO general intervention logic presented above in Section 1.3 as Figure 1.2 with the generic intervention logic in Figure 2.1, the former is more complicated as it can contain multiple strands of intervention logics; for example, UNIDO project outputs can lead to policy outcomes and/or institutional outcomes each with different intervention logics. In turn, each strand of the general UNIDO intervention logic affects enterprises and ultimately individual entrepreneurs, employees, consumers, and other users of various goods and services, with ripple effects to households and communities following an array of intervention logics and programme theories. The review sought to identify evidence of such effects.

## 2.3 Methodology

The review followed an eight-step methodology: (1) **Reviewed selected evaluation reports** to identify evidence of realized or potential contributions to the MDGs. For consistency, the main findings were summarized in a table, provided as the template in Annex 8, completed with data for 'India'. (2) **Identified underlying intervention logics** with the MDGs as higher-level objectives for each MDG, drawing in particular on the thematic evaluations and using the approach paper as a frame of reference. For comparison and building on the generic UNIDO intervention logic depicted in Figure 1.2, the review also introduced general UNIDO intervention logics for each programme component covered. (3) **Analyzed UNIDO projects and compared with the intervention logic.** (4) **Identified impact drivers**, assumptions and other factors important for achieving results, as well as (5) **compared typical project indicators with the MDG indicators.** (6) Complemented the analysis with information obtained in **interviews with project managers.** A list of persons met is included in Annex 9. On this basis (7), **drew conclusions about contributions to each MDG.** With regard to MDG 1, the review also made use of the findings of the recent Desk Review on what UNIDO has done to reduce poverty.<sup>25</sup> Furthermore, it (8) **provided details on how such contributions were reported**, and especially identified if they were captured in non-UNIDO documentation.

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<sup>24</sup> See Frans Leeuw and Jos Vaessen for NONIE (2009), Impact evaluations and development, pages 4-6.

<sup>25</sup> UNIDO (2010), 'Desk Review: What has UNIDO done to reduce poverty – Evidence from UNIDO Evaluations 2008 and 2009,' (Henceforth referred to as 'Poverty Review'.)

## 2.4 Limitations

The review may underestimate UNIDO's contribution to the MDGs because most evaluations assessed projects that were still ongoing, close to completion or just completed. Similarly, many evaluation reports mentioned that it was too early to assess impact owing to the expected time lag between project completion and emergence of impact. In some cases, the reports referred to potential impact, but due to the absence of results-based monitoring data, the potential impact could not be verified. The review solely focused on technical cooperation projects, hence not considering any possible reinforcing contributions from global forum functions. The review did not cover projects from some programme components that were less well represented in the evaluation reports, namely programme components C.1.2: Business, investment and technology service; C.2.2: Competitive productive capacities for international trade; and C.2.5: Corporate social responsibility. Well-defined intervention logics were not available for some programme components, e.g. for agro-industry and rural development.

Some projects might contribute towards more than one MDG, and the review may not fully have demonstrated these linkages and/or synergies. This was a concern notably between MDG 1 and MDG 3. The review compared most projects with a general UNIDO intervention logic following the 2012-2013 programme structure although they had been designed and implemented under slightly different structures of previous programme and budgets (such as the earlier service modules), but it was assumed that the technical changes of each module or component had not been significant.

The review did not consider the efficiency of contributions in terms of total effort or total project budgets compared with actual or potential MDG contributions.

### 3.

## Findings

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This chapter provides examples of realized or potential contributions of UNIDO technical cooperation projects to the MDGs as reported in the evaluation reports. It analyzes intervention logics for UNIDO technical cooperation projects and identifies contributions measured in quantitative or qualitative terms. It also examines indicators, lists impact drivers and reviews other observations made in the evaluation reports. The reference points for each MDG will be the global targets and indicators, but it is noted that country-level projects should contribute to national MDGs, which may vary slightly from global MDGs and from country to country.

### 3.1 Project contributions to MDG 1: Eradicate extreme poverty and hunger

MDG 1 Targets	MDG Indicators
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below \$1 (PPP) per day 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B:  Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below \$1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption

MDG 1 deals with income, employment, and hunger; the targets and indicators measure primarily economic aspects of poverty. It is recalled that poverty is

multidimensional, as discussed in the 'Poverty Review'.<sup>26</sup> These dimensions are: economic, human, political, socio-cultural, and protective as presented in Box 3.1.<sup>27</sup> Most evaluation reports have referred to the economic dimension of poverty, but whenever possible, this review attempts to highlight other dimensions.

Box 3.1: The core dimensions of poverty

<p><b>Economic capabilities</b> mean the ability to earn an income, to consume and to have assets, which are all key to food security, material well-being and social status.</p> <p><b>Human capabilities</b> are based on health, education, nutrition, clean water, and shelter. These are core elements of well-being as well as crucial means to improving livelihoods.</p> <p><b>Political capabilities</b> include human rights, a voice and some influence over public policies and political priorities.</p> <p><b>Socio-cultural capabilities</b> concern the ability to participate as a valued member of a community. They refer to social status, dignity and other cultural conditions for belonging to a society.</p> <p><b>Protective capabilities</b> enable people to withstand economic and external shocks. Thus, they are important for preventing poverty. Insecurity and vulnerability are crucial dimensions of poverty with strong links to all other dimensions.</p>
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Source: OECD: DAC Guidelines on Poverty Reduction, 2001

According to the MTPF 2010-2013 and the PB 2012-2013, UNIDO intends to contribute to MDG 1 primarily through Programme C.1 'Poverty reduction through productive activities', and also through Programme C.2 'Trade capacity building', spanning a wide range of activities as listed in Table 3.1.

Table 3.1: Programme components with intended contribution to MDG 1

MDG 1	Eradicate extreme hunger and poverty
Programme C.1 – Poverty reduction through productive activities	
<p>Component C. 1.2 - Business, investment, and technology services</p> <p><b>Component C. 1.3 - Agribusiness and rural entrepreneurship development</b></p> <p><b>Component C. 1.4 - Women and youth in productive activities</b></p> <p><b>Component C. 1.5 - Human security and post-crisis rehabilitation</b></p>	

<sup>26</sup> UNIDO (2010), Desk review: What has UNIDO done to reduce poverty – evidence from UNIDO evaluations 2008 and 2009, or Poverty Review, pages 6 and 7.

<sup>27</sup> Reproduced from Ibid page 6 as defined by OECD (2001) 'The DAC Guidelines, Poverty Reduction' pages 38-39.

Programme C.2 – Trade capacity building
<p>Component C.2.2 –Competitive productive capacities for international trade</p> <p><b><i>Component C.2.3 - Quality and compliance infrastructure</i></b></p> <p><b><i>Component C.2.4 – Industrial export promotion and SME consortia</i></b></p> <p>Component C.2.5 – Corporate social responsibility for market integration</p>

The review of UNIDO’s actual or potential contribution to MDG 1 attempted to cover the components highlighted in italics, on the basis of information available in the evaluation reports. In addition, some components from Programme C.3 ‘Environment and energy’ may potentially contribute to MDG 1 and are therefore also included.

Overall, the evaluation reports provided limited evidence of contributions to MDG 1 from UNIDO projects. The main reason for this limitation was that the evaluations typically took place too early for the expected impact to have materialized. Some reports predicted potential impact in the form of expected or likely job creation, employment or income generation. The evaluation reports also observed that indicators for the outcomes and expected impact levels were inadequate for many projects, rendering the identification and recording of results at those levels impossible or characterized by unsystematic and anecdotal evidence and lack of monitoring data.

Below we will analyze these evaluation findings in light of the intervention logic for the thematic area or programme component of the projects as well as the compatibility of UNIDO impact indicators with the MDG 1 indicators. The section is organized, as much as possible, according to the programme components based on the corresponding thematic evaluations, supplemented with examples from country and/or project evaluations.<sup>28</sup>

**(a) Agro-industrial development projects**

The thematic review of agribusiness and agro-industrial development initiatives conducted in 2009 and 2010 covered about 50 projects concerning food processing, non-food processing, agro-machinery, and livelihood interventions with focus on either rural development or international competitiveness.<sup>29</sup> The findings of the review are assumed to be broadly indicative of projects

<sup>28</sup> It is assumed that the evaluations are indicative of the projects within the respective programme components although the definition may have changed slightly since the projects were implemented and evaluated.

<sup>29</sup> UNIDO (2010), Thematic Review, UNIDO Agri-business/Agro-Industry Development Interventions. (henceforth referred to as TR Agro). See Annex C for a typology placing the evaluated projects into seven categories).

implemented under programme component C.1.3 'Agribusiness and rural entrepreneurship development'.

The thematic review found that impact in the form of clear contributions to poverty reduction was notoriously difficult to capture owing to a long cause-effect chain from inputs and activities to the project's ultimate goal, and because many evaluations had been undertaken too early to assess the impact.<sup>30</sup> With respect to rural food processing projects, the review noted that the effects on farmers were rarely analyzed.<sup>31</sup> For instance, the bamboo projects were highlighted as good examples of value-chain development, but no income or employment benefits were reported by the projects for producers, craftsmen or SMEs.<sup>32</sup>

The review identified the following *impact drivers*: market for processed products and additional investments beyond the demonstration plant or otherwise.<sup>33</sup> Furthermore, for projects in the textile and leather sub-sectors, the fierce competition on world markets could become an inhibiting factor.<sup>34</sup> The thematic review concluded that impact was a concern, and that ex-post impact assessments would be needed to capture poverty reduction effects.<sup>35</sup>

These findings are largely echoed in the country evaluations, which provide a number of examples of potential contributions to MDG 1 within the agro-industrial and rural development areas. One example was in Tanzania, where a project to support cashew nut processing was found to have a good job-creation potential, as would an agricultural waste management project.<sup>36</sup> Another example was in India, where a bamboo project was assessed as 'having a clear poverty reduction potential'.<sup>37</sup> However, the evaluations did not have access to data needed to estimate the likely number of jobs to be created or the extent of additional income to be generated.

Few examples of *impact drivers* were noted: in one case, involving fish smoking and drying in Zanzibar, the strong determination of producers (beyond usual levels of ownership) to double the gross margin may have acted as an impact driver. In the bamboo project in India, the limited up-take among artisans of new

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<sup>30</sup> Ibid page 21.

<sup>31</sup> Ibid page 24.

<sup>32</sup> Ibid pages 25 and 26.

<sup>33</sup> Ibid page 24.

<sup>34</sup> Ibid page 45.

<sup>35</sup> Ibid page 50.

<sup>36</sup> CE Tanzania, pages 29 and 30. Both projects were components of a joint programme within the DaO programme.

<sup>37</sup> UNIDO, 2011, Independent UNIDO Country Evaluation, India, page 88. Henceforth referred to as CE India

products and technologies seemed to act as an inhibitor for achieving maximum impact.<sup>38</sup>

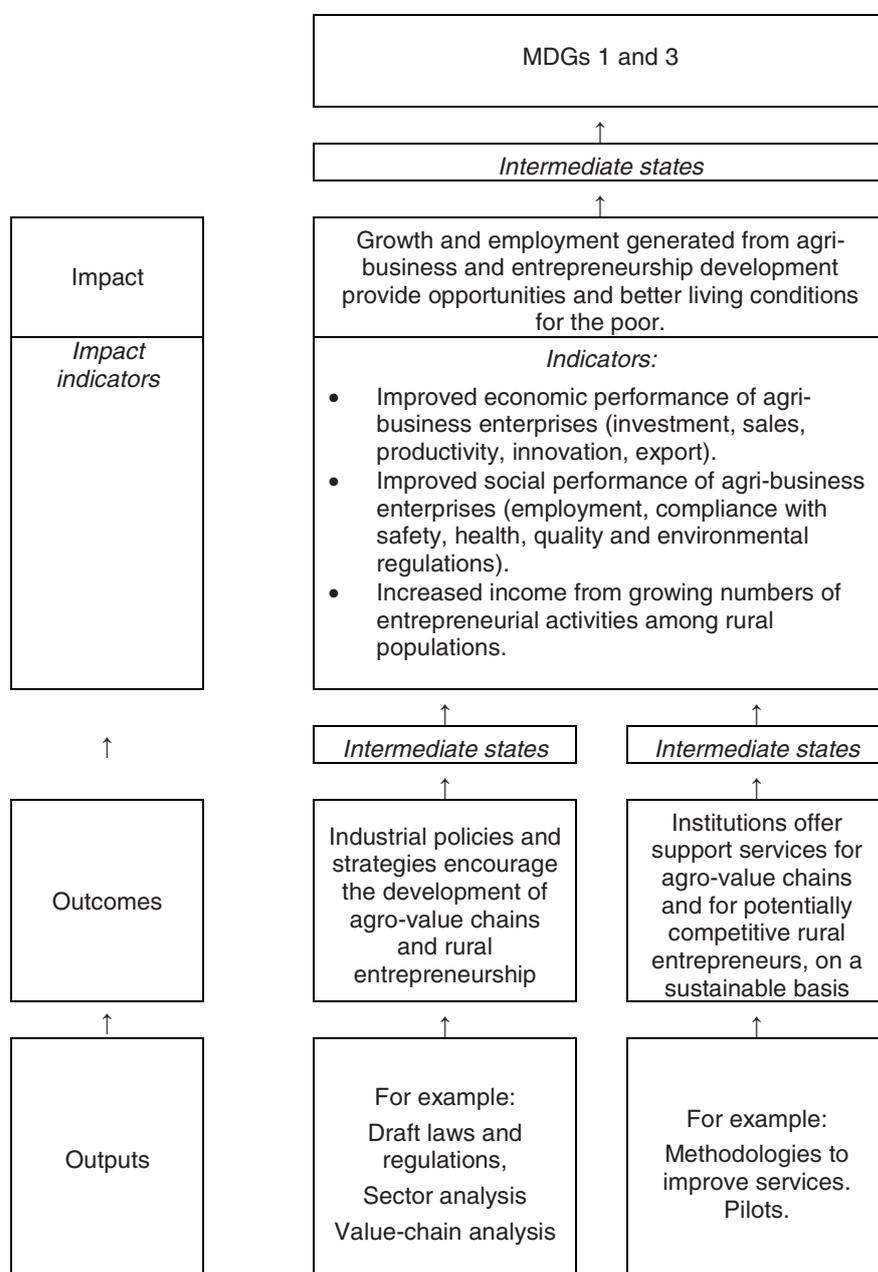
This section will attempt to examine the underlying intervention logic. Although the thematic review did not present an intervention logic or results chain for agro-industrial development projects, a general intervention logic has been developed on the basis of the general UNIDO intervention logic in Figure 1.2, completed with information from the PB 2012-2013 Programme Component C.1.3 'Agribusiness and rural entrepreneurship development' as depicted in Figure 3.1.<sup>39</sup>

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<sup>38</sup> Ibid page 62.

<sup>39</sup> PB 2012-2013, pages 46-47.

Figure 3.1: General intervention logic for agri-business and rural entrepreneurship development projects



For examination in this section, a project in Tanzania within the UNDAF was assessed in the country evaluation of that country and is described below in Box 3.2.

### Box 3.2: Potential job creation in cashew nut processing in Tanzania

Within the Tanzania UNDAF Joint Programme 1: 'Wealth creation, employment and economic empowerment', three commercial pilot centres for cashew nut processing 'should' generate at least 1,000 jobs in the client enterprises, and add value to farmers' productivity. The existing and potentially growing demand for cashew nuts would help sustain project benefits. However, the operators of at least one pilot centre did not seem to be convinced that the new technologies would make their enterprise more profitable, preventing them from expanding activities and thus foregoing potential wealth and job creation.<sup>40</sup>

The creation of 1,000 jobs would be significant compared with total employment in food industries in Tanzania. In 2008, the food industries accounted for 44,900 jobs, growing at a rate of about 400 per year, according to the Annual Industrial Survey.<sup>41</sup> Would the underlying intervention logic reveal how an additional 1,000 jobs could be generated, when it could be achieved, and how it could contribute to Tanzania's MDG 1 targets?

If fact, the cashew nut processing project would be subject to two inter-locked intervention logics, namely one aligned to the UNIDO general intervention logic for agri-business projects and one aligned to the Tanzania development framework.

According to the UNIDO intervention logic, the impact would be generated through institutional support (the three pilot centres) and measured by the economic and social performance of the targeted client enterprises, including employment created. However, no such data could be accessed by the evaluation apart from an estimation of potential future employment generation. Impact drivers in this context could be associated with the perception of the centre operators as noted in the country evaluation.

On the basis of information in the Tanzania evaluation report, an intervention logic aligned to the Tanzania development framework is visualized in Figure 3.2 where the UNIDO project and the ultimate MDG are shaded.<sup>42</sup>

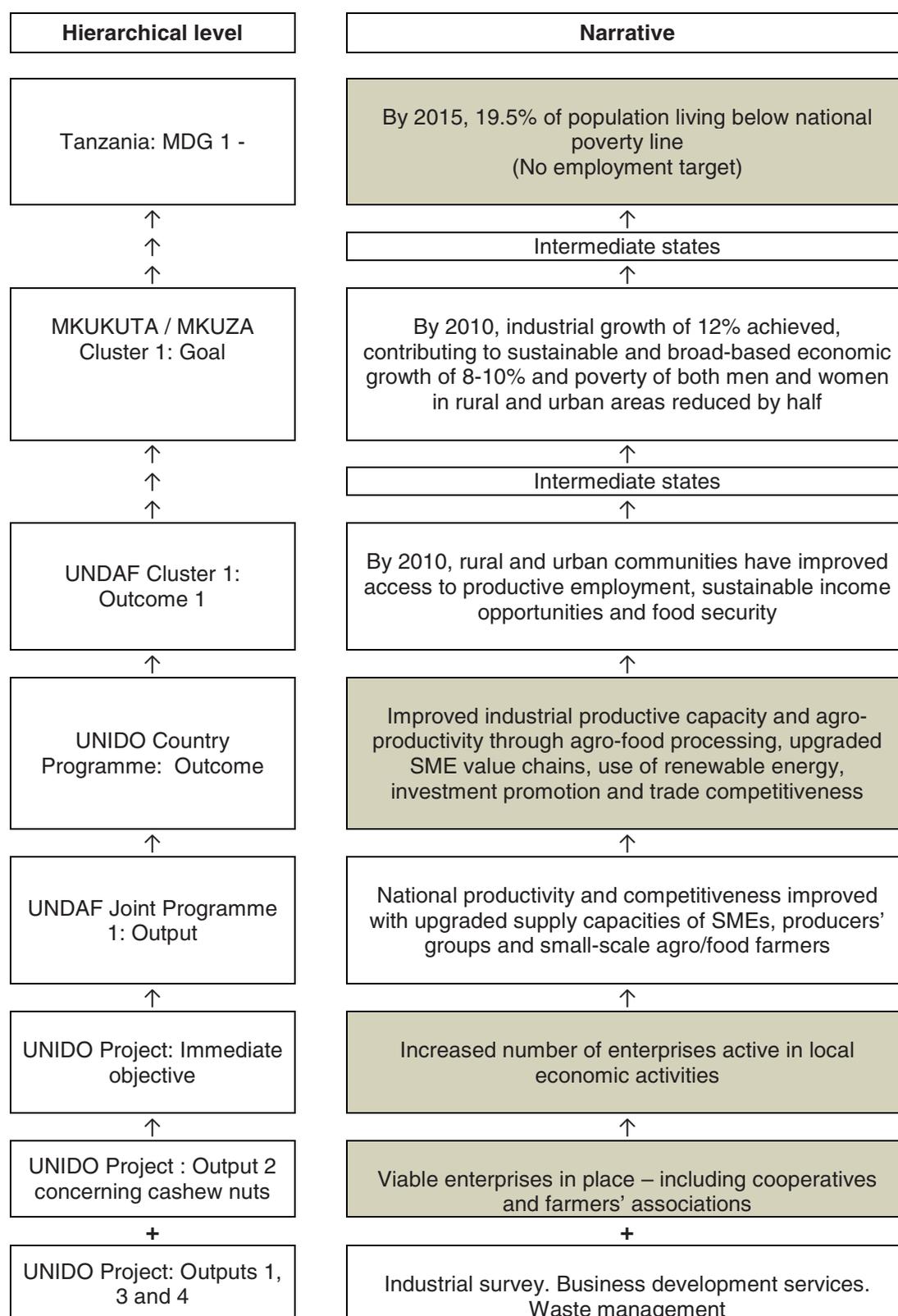
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<sup>40</sup> UNIDO (2010), Independent UNIDO Country Evaluation, United Republic of Tanzania. Joint Project 1 - Wealth creation, employment and economic empowerment, (henceforth referred to as CE Tanzania), pages 29, 30, 40, and 41.

<sup>41</sup> United Republic of Tanzania, Ministry of Industry, Trade and Marketing, Annual Survey of Industrial Production and Performance, 2008, Analytical Report, Table 18, page 31. It could be noted that this survey is supported under another component of the same Joint Programme 1.

<sup>42</sup> The intervention logic is created on the basis of the country programme logical framework, CE Tanzania, Annex 2, page 87 and Table 7, Effectiveness of Joint programme 1, CE Tanzania page 29. The actual project document with project strategies or indicators was not readily available.

Figure 3.2: Intervention logic for project contribution to national MDG 1:  
Cashew nut processing in Tanzania



Placing the UNIDO project contribution within this broader perspective does not by itself explain how the impact would be achieved or its likelihood to occur. Rather, it shows that, in addition to assumptions and impact drivers at the enterprise and sub-sector levels, developments in the economy as a whole are important for achieving the MDG 1. This finding confirms the thematic review conclusion that clear contributions to poverty reduction are difficult to capture due to long cause-effect chains. However, building on the UNIDO general intervention logic, contribution to employment creation could be captured within project monitoring systems, through ex-post research, or in national data—such as the Annual Industrial Survey had the data been available.

The cashew nut value chain in Tanzania is now the subject of a new project, which is mentioned below.

### ***Recent initiatives by the Agri-business Development Branch***

Working to support value-chain development, the Agri-business Development Branch has developed several tools to improve the diagnostic studies and identification of opportunities along the value chain.<sup>43</sup> The Branch recognizes the need for stronger backward and forward linkages as well as the need for investments in multiple businesses along the value chain and further investment in infrastructure. To influence the likelihood that these conditions materialize, the Branch has formed strategic alliances with the Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD), and the African Development Bank (AfDB) in the so-called 'African Agribusiness and Agro-industries Development Initiative' (3ADI). The 3ADI is also linking up with a private equity fund, which handles investments in agro-business in Africa. Within the framework of the 3ADI, the Branch has launched a preparatory project covering the value chains for more than ten commodities in 13 countries, mostly in Africa.<sup>44</sup> One of the first prospective interventions resulting from the preparatory work concerns support for Tanzania's cashew value chain, suggesting a programme results chain as depicted in Figure 3.3.<sup>45</sup> The initial UNIDO intervention supports the processing and marketing parts of the value chain with assistance to eight pilot units, leading to improved and expanded cashew nut processing and market for cashew products effectively pervaded. In addition, UNIDO will lead the component for 'Value-Chain Governance.'

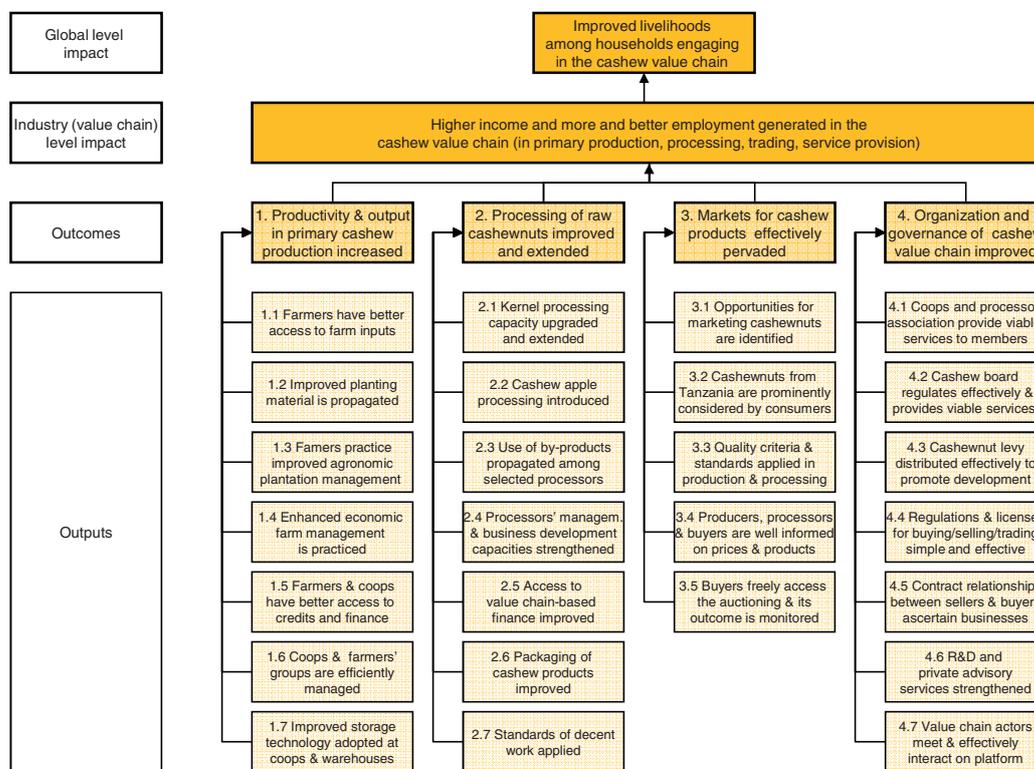
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<sup>43</sup> UNIDO (2011), 'Industrial value chain diagnostics: An integrated tool', and 'Pro-poor value chain development: 25 guiding questions for designing and implementing agro-industry projects'.

<sup>44</sup> UNIDO (2011), GC.14/15 UNIDO activities related to agri-business and job creation, paragraph 12; see also [www.3adi.org](http://www.3adi.org). See also project TF/GLO/10/016 and TE/GLO10/017, Support to agri-business and agro-industry development initiatives.

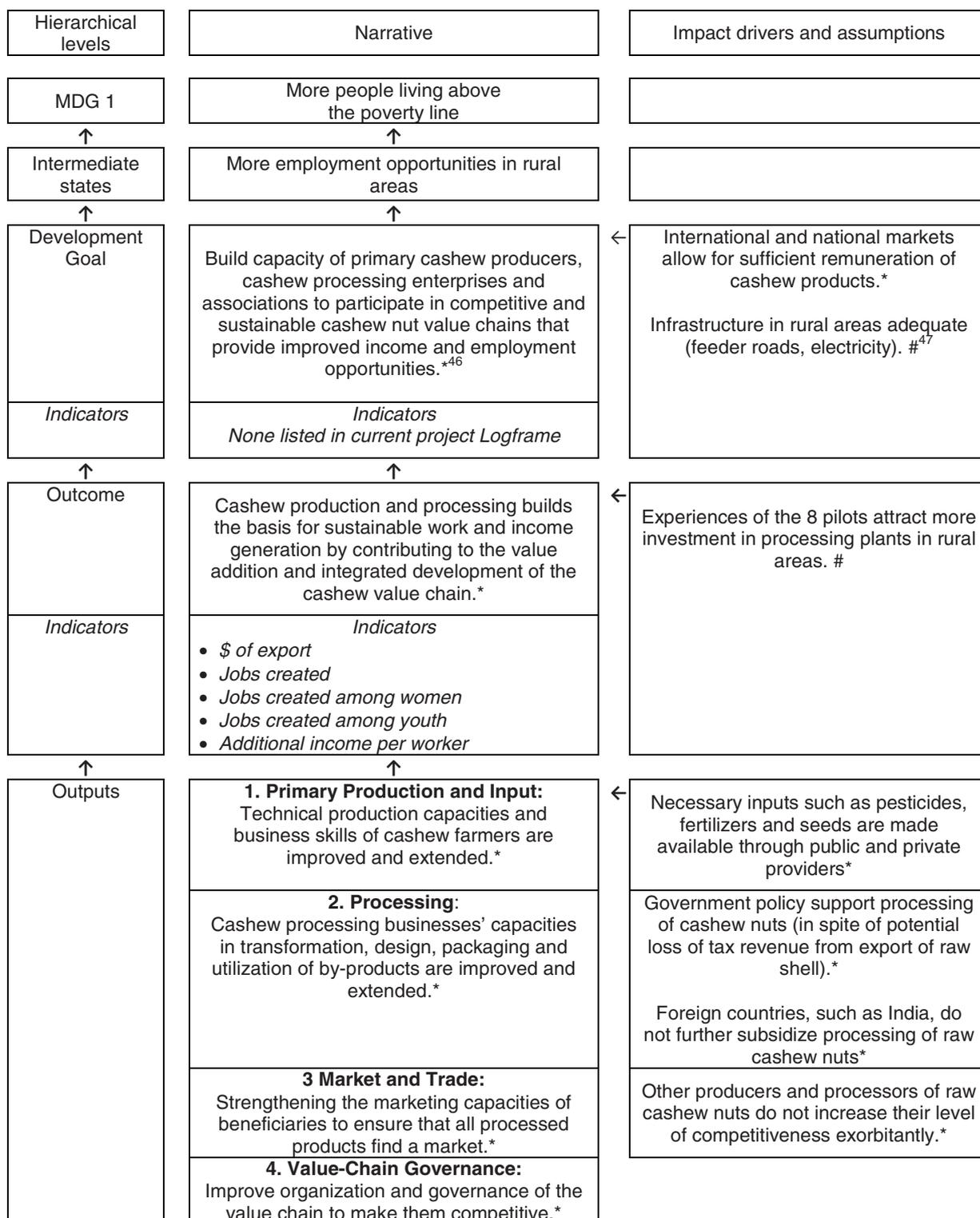
<sup>45</sup> Presented in project document: Support programme for the development of the cashew nuts and red meat/leather 'Value chain support programme for Tanzania's cashew and red meat / leather industry – Prospective interventions and UNIDO action plan.' Pages 6 and 8.

Figure 3.3: Programme results chain - Cashew value chain in Tanzania



The project document also provides a logframe, which is attached in Annex 10. Building on the logframe, a new intervention logic on the possible path from project output to the country MDG 1 is attempted in Figure 3. 4.

Figure 3.4: New intervention logic for cashew value-chain development



<sup>46</sup> \* denotes narrative or assumptions as in the project logframe.

<sup>47</sup> # denotes assumption or impact driver listed elsewhere in the project document rather than the logframe.

A comparison of the programme results chain (Figure 3.3) and the new intervention logic (Figure 3.4) with the general agri-business intervention logic (Figure 3.1) shows some compatibility at the higher impact levels, namely contributions to improved living conditions among households engaged in the cashew nut value chain. This is more so for the programme results chain than for the new logframe-based intervention logic where the narratives for development impact and outcome are less clear.<sup>48</sup> Differences exist at the output and outcome levels where the general intervention logic features policy and institutional outcomes, while the value-chain approach features outcomes at various stages of the value chain that might include elements of institution outcomes.

This new intervention logic (Figure 3.4) lists assumptions and impact drivers showing the importance of government policy support, scaling up from the pilot units, adequate infrastructure, and international market conditions. The recently developed project document describes how the 3ADI has played a role in framing the project, and initiatives are under way to garner further support for value-chain development but it has not yet been clarified if important assumptions, such as the existence of a conducive government policy, can be made, leaving the impression that more precise impact strategies are to be developed during project implementation.<sup>49</sup>

With respect to indicators, the new logframe (Figure 3.4) offered no indicators at the impact level, but some at the outcome level, and no target values were defined. For this and other projects to support value-chain development, it will be important to design logical framework matrices that include indicators for the outcome and impact levels. In the value chain, the results are defined as 'Higher income and better employment generated in the cashew value chain (primary production, processing, trading, service provision).' This result statement offers the opportunity to define indicators for the logframe. At the highest impact level, the indicators should preferably be compatible with the MDG 1 indicators, for instance, by referring to cashew farmers' income in relation to the national poverty line or similar. For employment generated, the indicator could be compatible with data already being collected by national authorities, such as for the Annual Industrial Performance Survey in Tanzania. Furthermore, it would be useful to set aside funding for results monitoring and evaluation to generate evidence on project impact in a systematic manner following a pre-defined methodology. Monitoring data would be valuable not only for UNIDO or policy makers in the country, but in the first instance, for parties engaged in Value-

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<sup>48</sup> The less than optimal formulation of impact statements and lack of impact indicators could be the result of logframe formats requested by partners or donors.

<sup>49</sup> The prospective document 'Value chain support programme for Tanzania's cashew and red meat / leather industry – Prospective interventions and UNIDO action plan' listed such assumptions as 'further requirements' on page 15.

Chain Governance. The Donor Committee on Enterprise Development (DCED) has done interesting work in respect to results measuring in value chains.<sup>50</sup>

In summary, the examination of the sample project largely confirmed the findings of the thematic and country evaluations—that strategies for scaling up beyond pilots is of strategic importance and that an array of external factors, notably government policies and market conditions for the end-product, are critical. The value-chain approach is not completely aligned with the general UNIDO intervention logic and the translation into a logframe is not evident, at least not in the case studied. The definition of indicators and practical monitoring mechanisms are also important in order to track the actual contribution to higher level goals. In the case of MDG 1, employment generation seems to be the most direct contribution.

#### **(b) Entrepreneurship curriculum development projects**

The evaluation of the Mozambique country programme covered project TF/MOZ/07/003 – ‘Entrepreneurship Development for Youth’, which flags the Entrepreneurship Curriculum Programme (ECP) as having a strong impact potential.<sup>51</sup> This section explores this potential by examining the underlying intervention logic and uses this project as an example of potential contribution to MDG 1 by projects under programme component C.1.4. ‘Women and youth in productive activities’. The UNIDO general intervention logic for this programme component is produced below in Figure 3.5 building on Figure 1.2 and information from the PB 2012-2013.<sup>52</sup>

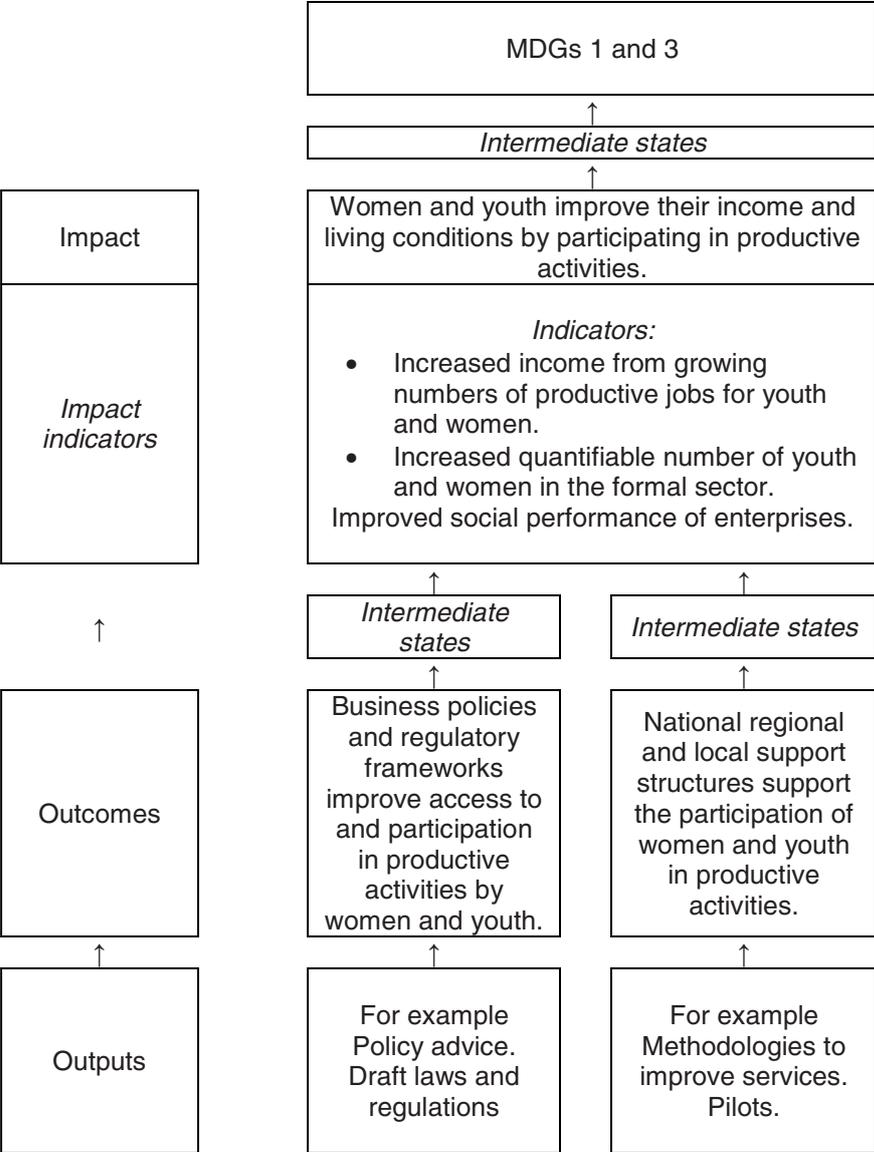
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<sup>50</sup> See for example DCED: ‘Measuring Achievements in Private Sector Development’, (March 2010), ‘Why have a standard measuring results’ or ‘A Guide to making results chains’ (January 2012) [www.enterprise-development.org](http://www.enterprise-development.org)

<sup>51</sup> UNIDO (2011), Independent Evaluation Report, Mozambique, Country Evaluation, pages 84-87, henceforth referred to as CE MOZ

<sup>52</sup> PB (2012-2013), pages 47-48.

Figure 3.5: General intervention logic for women and youth in productive activities



The basic principle behind the ECP is that people with entrepreneurial attitudes and skills are more likely to become self-employed, thereby earning a decent income, or become involved in new business ventures, hence creating wealth and employment opportunities. The project in Mozambique is described in Box 3.3.

### Box 3.3: Entrepreneurship Curriculum Programme in Mozambique

The Ministry of Education and Culture of Mozambique has since 2007 introduced the ECP in about 160 secondary and vocational schools across the country. This four-year curriculum teaches students how to identify business opportunities, and how to set up a business, in theory and practice, through a final real-life project. It also encourages entrepreneurial attitudes. By the end of 2011, the ECP had reached 136,000 students, and 52,300 had graduated from the programme. A sample survey showed that 85 per cent of graduated students acquired entrepreneurial skills and 39 per cent of enrolled students had started their own micro-businesses based on their final real-life project, which in many cases generated enough income to improve the livelihood of the student and his/her family. The success thus far has been ascribed to strong government ownership and a successful strategy for moving from pilot to full scale.<sup>53</sup>

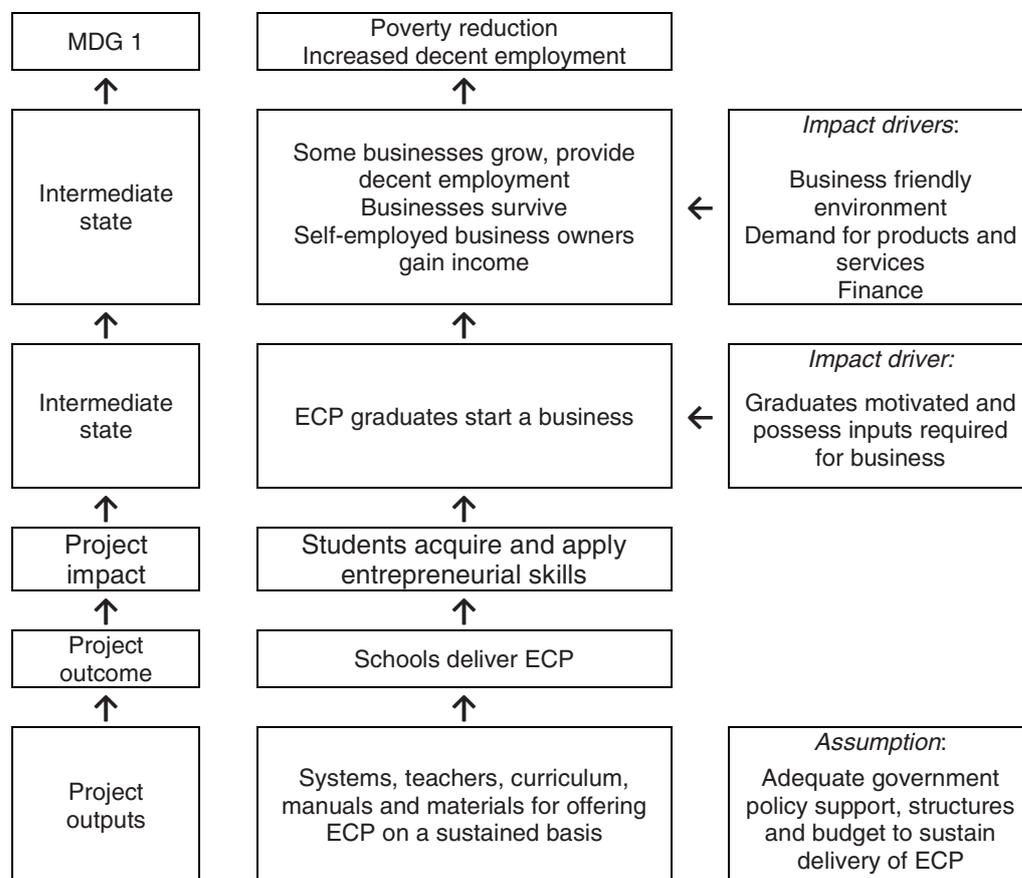
The following intervention logic in Figure 3.6 is based on the above theory of change and the stated project strategy, namely: 'To support the growth of competitive domestic SME sector by developing the attitude and skills of young people from agrarian to entrepreneurial by introducing the entrepreneurship curriculum at secondary and vocational schools thereby creating the foundation for bottom-up growth', and information obtained from the project manager.<sup>54</sup>

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<sup>53</sup> Ibid and data obtained from the project manager. The project has a strong gender perspective, which will be mentioned in Section 3.2 below.

<sup>54</sup> Project document, TF/MOZ/07/003 Entrepreneurship Development for Youth, section on project strategy.

Figure 3.6: Intervention logic for ECP projects based on TF/MOZ/07/003<sup>55</sup>



<sup>55</sup> Results levels in the intervention logic are as defined in project LFM where outputs are the results produced by the project; outcomes are the results achieved by the project client (Ministry of Education), and impact is the result achieved by the participating schools.

The Mozambique MDG 1 Target B aims to guarantee employment for all, with its MDG 1, 1.5 Indicator – Employment-to-total-population ratio – reaching 100 per cent by 2015.<sup>56</sup> Currently, the employment-to-population ratio is 75 per cent, of which 62 per cent represents self-employed persons. The government specifically aims to increase the number of self-employed as a means to increase the overall employment ratio. Project TF/MOZ/07/003 supports this target. As the ECP is rolled out in schools across Mozambique, the programme has the potential to reach a large share of the youth population. If the number of students who started a micro-business while enrolled in the course (estimated at 39 per cent according to a recent sample survey) is considered a proxy indicator for entrepreneurial intentions and if, with some caution, is considered an indication of expected rate of business engagement by graduates, then already 53,000 micro-enterprises have been established and with more and more students graduating from the ECP, the programme could make a significant contribution to the Mozambique MDG 1 Target B. In turn, more persons being gainfully self-employed would lower the percentage of the population living below the poverty line and hence help achieve MDG 1, Target A, namely 40 per cent of the population living below the poverty line by 2015.

Overall, the ECP programme logic is compatible with an intervention logic leading to the MDG 1 as well as with the general UNIDO intervention logic for this programme component. The project follows the path of supporting national institutions and structures, thereby reaching the target population and – via some intermediate states – contributes to improving their living conditions.

The ECP *impact indicators* relate to the number of graduates, which engage in entrepreneurial activities. In this regard, a tracer study would be required to know the actual rate of business engagement by graduates, number of surviving businesses, employment created, and income generated. Further research also would be required to learn if envisaged self-employment leads to income above the poverty line, how it affects family livelihood, and what happens to students who do not graduate or do not establish their own micro-business? Can long-term effects be noticed in terms of growth of the informal sector and, eventually, can newly registered SMEs be traced back to ECP graduates? What impact drivers were present to support the development?

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<sup>56</sup> Government of Mozambique, Progress Report on the Millennium Development Goal, 2010, Table 1, Overview of progress towards the MDGs, page 1, Table 3 Key Indicators page 8, pages 9, 15-21.

**(c) Cottage and micro-enterprise promotion projects as a means of supporting human security and post-crisis rehabilitation**

For countries emerging from a crisis, it is particularly urgent to equip members of vulnerable groups to withstand economic hardship. Projects in this area help bolster the protective dimension of poverty reduction while alleviating the economic dimension. This section examines the evaluation findings for a project in Iraq aimed at job creation through the promotion of cottage and micro-industries in the Al-Qadessiya governorate.<sup>57</sup> The project is selected as an example of a project implemented under programme component C.1.5 ‘Human security and post-crisis rehabilitation’. The project focused on the early rehabilitation of human capacities through the provision of training and equipment in a range of trades to about 1,775 trainees selected among vulnerable groups, establishment of about 20 production groups, and capacity development for potential community leaders. As it was premature to assess impact of the production groups and the community leaders, only the training component is examined. The results are summarized in Box 3.4 below.

**Box 3.4: Job training for cottage and micro-industry in Iraq**

This project took place in the poor Al-Qadessiya province of Iraq. It targeted vulnerable groups and trained selected men, women, and youth in 11 different trades and crafts. Shortly after attending training and receiving a tool kit, an estimated 670 trainees, out of 1,775, found employment or became self-employed thanks to the training. A sample survey showed that income increased, in varying degrees, among the employed trainees: those with no income before the training earned between \$50 and \$100 per month after the training, and those with some income earned between \$150 and \$250 per month after the training. The additional income was mostly consumed by the families, and about 20 per cent of families obtained better housing. As a consequence of the project, it is plausible to say that the livelihood of 670 vulnerable families improved. Originally, the target was to reach about 2,000 families. The main impact driver was a high demand for certain services such as telephone repair. The identified lack of fiscal incentive possibly acted as an inhibitor for additional employment creation.

The evaluation report found divergent rates of employment following the training, ranging from 31 per cent in own survey; 30-40 per cent estimated by trainers; and 69 per cent claimed by project management. This underscores the evaluation’s recommendation to introduce an independent monitoring and reporting mechanism. The evaluation did not specifically mention the relation to the official poverty line in Iraq, which is about \$2.20 per day per person according to the

<sup>57</sup> UNIDO (2011), Independent evaluation, Iraq, Job creation through Cottage and Micro-Industries Promotion in Al-Qadessiya (FB/IRA/07/001) (henceforth referred to as PE Iraq).

UN.<sup>58</sup> Thus the post-training income did help some families get out of extreme poverty, depending on family size. The evaluation did point to the multiplier effect that the increased spending of the target families could positively affect the local economies.<sup>59</sup>

On the one hand, the evaluation pointed to several **impact drivers**, notably (a) demand for the trade or service in which training was provided, for example, telephone repair; and (b) support from chambers of commerce and industry associations to production groups.<sup>60</sup> On the other hand, impact was inhibited by (a) a modest demand for metal working, sewing, and weaving, (b) no government strategy to support micro-enterprises, and (c) a lack of fiscal incentives and credit facilities. Other factors that may also hamper sustainability or prevent trainees from gaining employment were also mentioned. The targeted governorate had an estimated 100,000 vulnerable families, and the evaluation questioned how the results could be scaled up. For instance, the evaluation did not find any strategy in place for continuous operation of the vocational training centre, apart from the trainers being on call from their usual jobs for future training. On the positive side, the project linked up with a United States Agency for International Development (USAID)-sponsored project that provided additional business training and planned to provide 20 trainees with \$5,000 each for investment in equipment and business start-up.<sup>61</sup> Based on information in the evaluation report, an intervention logic is attempted in Figure 3.7 for the project's training component.

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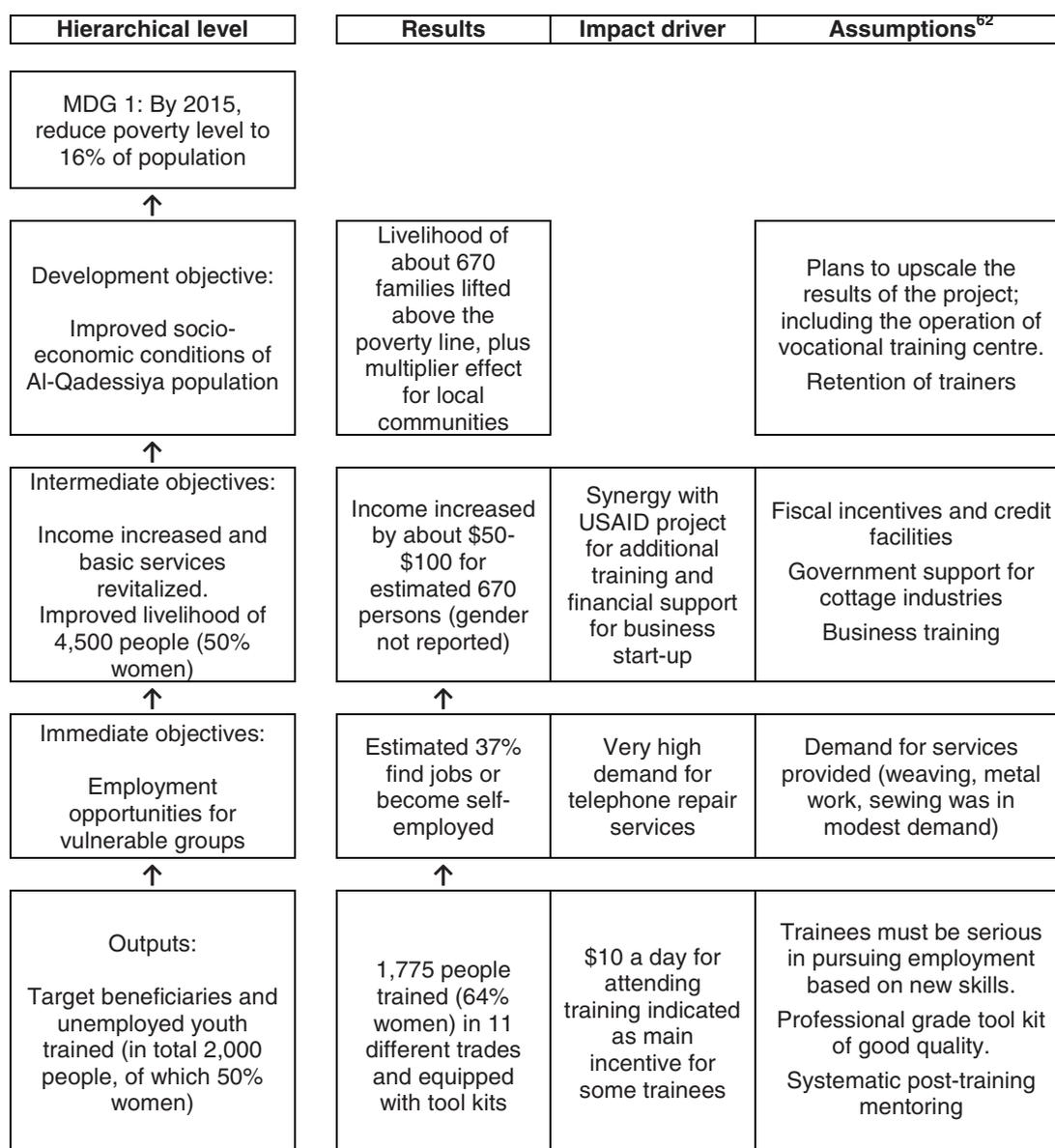
<sup>58</sup> Government of Iraq and the United Nations Country Team in Iraq (2010), *The Millennium Development Goals in Iraq*, Ministry of Planning and the Inter-Agency Information and Analysis Unit, Baghdad, [www.iauiraq.org](http://www.iauiraq.org), on MDG 1 (no page number).

<sup>59</sup> PE Iraq, page 46.

<sup>60</sup> Ibid page 53.

<sup>61</sup> Ibid pages 34 and 54.

Figure 3.7: Intervention logic for job training for cottage and micro-industry in Iraq



The intervention logic is compatible with an intervention logic leading to the achievement of the MDG 1. While the project had a limited outreach compared with the total population of the targeted governorate, it may have had a catalytic effect. Notwithstanding the difficult environment in which this and similar projects are operating, the intervention logic also shows that some impact drivers or inhibitors are really conditions that could be pre-empted, such as the quality of a tool kit or the demands for products or services, which could possibly have been

<sup>62</sup> The assumptions are based on factors mentioned in the report as reducing sustainability.

gauged by conducting a rapid market survey. Finally, the project demonstrates the difficult balance between relatively short-term interventions to kick-start some income generating activities and wider and longer-term development programmes.

**(d) Standardizations, metrology, testing, and quality projects**

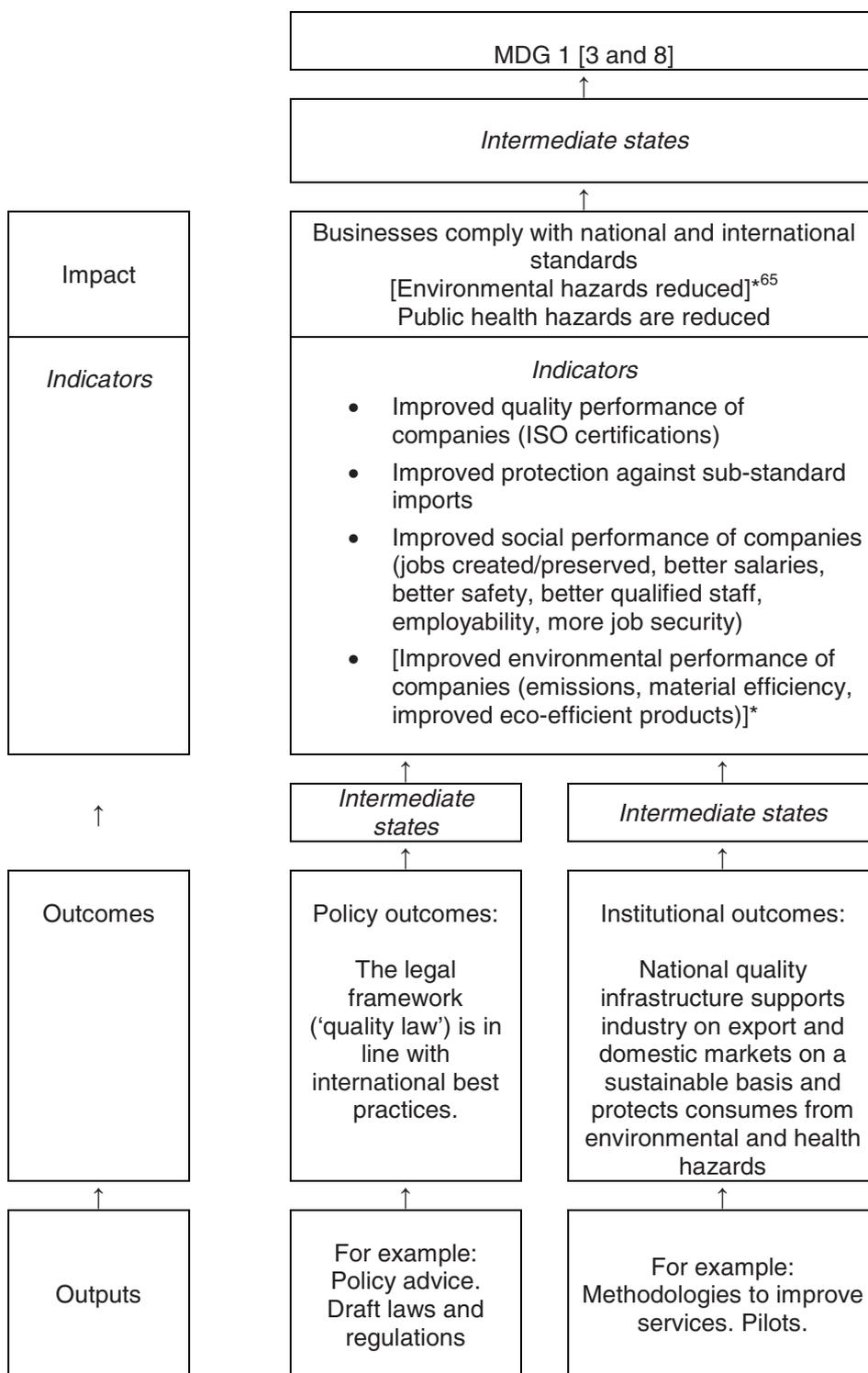
This section examines the realized or potential contribution to MDG 1 from UNIDO's projects in the area of standardizations, metrology, testing and quality (SMTQ) as described in programme component C.2.3 'Quality and compliance infrastructure'.<sup>63</sup> The SMTQ activities form part of programme C.2 'Trade capacity building,' which according to the latest PB, contributes to the achievement of MDG 1, MDG 3, and MDG 8.<sup>64</sup> The general intervention logic for programme component C.2.3 is generated in Figure 3.8 on the basis on the PB programme structure.

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<sup>63</sup> Programme and Budgets, 2012-2013, Document IDB.39/13/rev. page 54.

<sup>64</sup> Ibid page 49. Only contribution to MDG 1 is examined in this section.

Figure 3.8: General intervention logic for SMTQ projects



<sup>65</sup> \* denotes that environmental impact is not examined under MDG 1 but under MDG 7.

The findings in this section are primarily based on findings of two evaluation reports, namely a thematic SMTQ evaluation and an impact evaluation of several projects aimed to upgrade laboratories in Sri Lanka.

The thematic evaluation was conducted in 2009 and 2010 and covered a full range of SMTQ activities in 15 countries.<sup>66</sup> The evaluation concluded that: potential poverty impacts were not the main objectives of the projects evaluated; the welfare benefits of SMTQ systems are not well understood; and more research would be needed on the relationship between SMTQ development and poverty reduction.<sup>67</sup> In addition, the means to measure societal impact was unavailable e.g. lack of baseline surveys or bench-marking against other SMTQ systems, many indicators were inadequate for measuring impact as they were not specific enough, or monitoring systems had not been put in place.<sup>68</sup>

To assess the longer-term impact of SMTQ interventions, an impact evaluation of SMTQ projects in Sri Lanka was undertaken with a view to determine the effects of UNIDO interventions on industrial development and economic growth.<sup>69</sup> As this is the only impact evaluation among the evaluations reviewed, more details of its findings will be presented.

The impact evaluation covered six projects that helped upgrade a number of testing laboratories in Sri Lanka between 1999 and 2007. The evaluation developed ex-post an assumed intervention logic as depicted in Figure 3.9, and examined the plausible links from project outputs to laboratory outcomes, company outcomes, company impact, and society impact.<sup>70</sup>

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<sup>66</sup> UNIDO (2010), Thematic Evaluation Report, UNIDO activities in the area of SMTQ (henceforth referred to as TE SMTQ.)

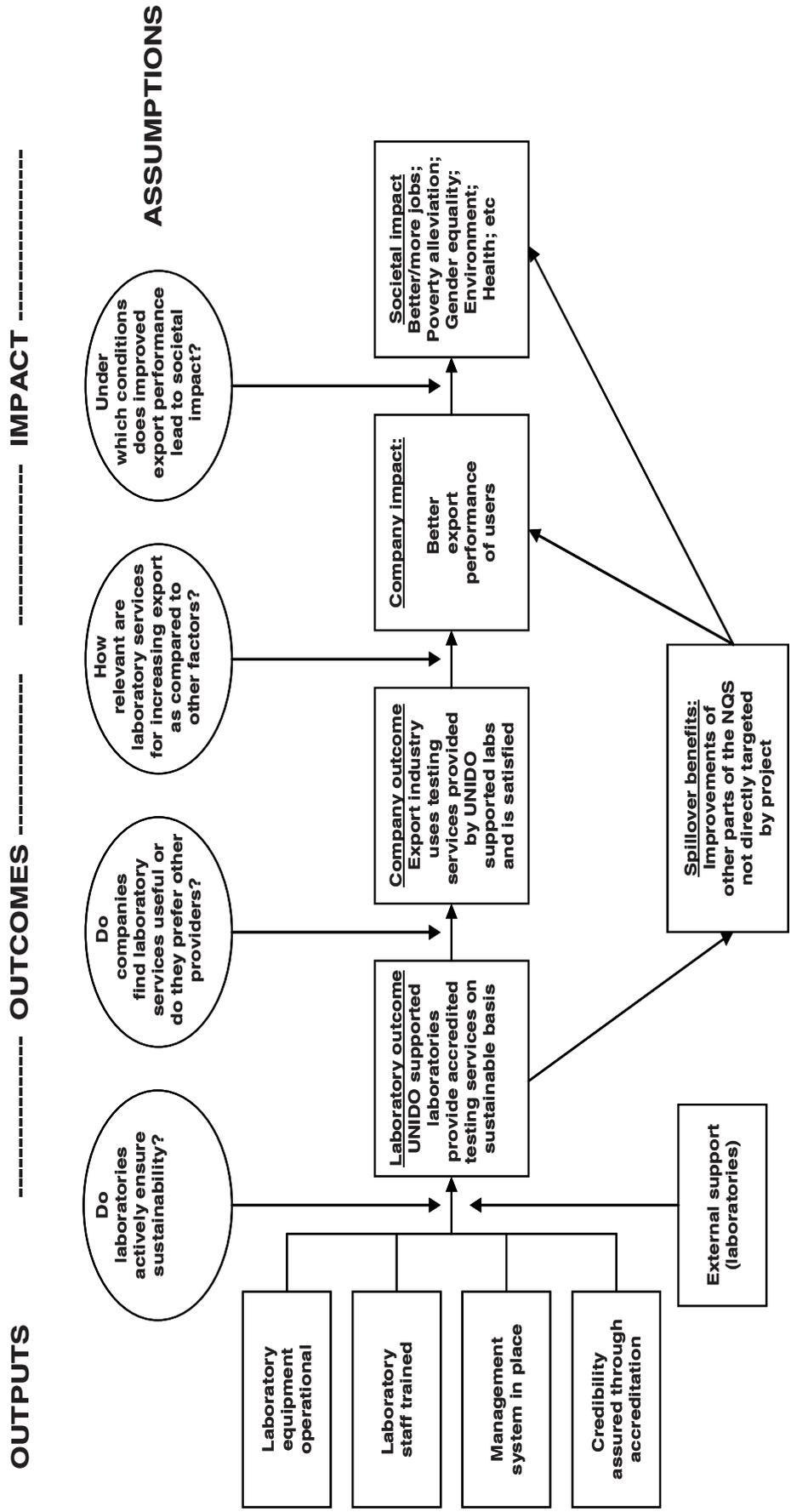
<sup>67</sup> Ibid page 81.

<sup>68</sup> Ibid page 90.

<sup>69</sup> UNIDO (2010), Independent Evaluation Report. Sri Lanka: Impact of UNIDO project in Sri Lanka in the area of SMTQ, page 41 (henceforth referred to as IE Sri Lanka SMTQ).

<sup>70</sup> Ibid page 5, and Figure 1, page 6.

Figure 3.9: Assumed overarching intervention logic of the laboratory upgrading projects under evaluation



Having confirmed that outputs and outcomes at the laboratory and company levels were realized, the evaluation tried to assess the *impact* at the company and societal levels on job creation and export. However, it was not possible to measure *company impact* mainly owing to (i) an attribution gap – many other factors influenced job creation and export; (ii) companies' unwillingness to reveal sensitive data; and (iii) the absence of a control group.

Using a sector approach focusing on the garment, tea and fisheries sectors, and including interviews with major importers in industrialized countries, the evaluation could arrive at some conclusions about the SMTQ projects' impact on export performance. The evaluation found that the export performance for garment and fish had improved owing to a multitude of causes but that this could not be attributed to any single factor or intervention. The evaluation concluded that it would be plausible to assume that UNIDO project interventions had contributed to Sri Lanka's improved export performance.<sup>71</sup> The in-house laboratories of enterprises in the garment sector had benefitted from the services of a textile laboratory supported by UNIDO, which enabled companies to comply with buyers' requirements. The fisheries sector benefitted from an upgrade of national quality capacities, which lead to better quality image of the country, hence helping to capture certain important export opportunities. The tea sector, however, benefitted less.<sup>72</sup>

Concerning the *impact at the society level*, the evaluation looked for positive influences on better and/or more jobs; alleviation of poverty; improving the gender balance; environment; public health; and others. The findings on jobs and alleviation of poverty are summarized in Box 3.5.

Box 3.5: Society level findings in three sectors benefitting from SMTQ projects in Sri Lanka

Sri Lanka's *garment sector* is heavily export-oriented, and in 2004, employed about 330,000 persons, of which 87 per cent were women. The wages were above the poverty line, and some companies had introduced corporate social responsibility programmes (in part to meet importer requirements). The garment industry served a sophisticated market driven by buyer awareness of labour (fair trade) and environmental standards (eco-friendly). These factors can be considered impact drivers. The evaluation concluded that positive societal impact of increased trade is more likely to occur in this sector than in others.

<sup>71</sup> Ibid pages x, 25 and 26.

<sup>72</sup> Ibid pages 27-30.

Tea is Sri Lanka's second largest export, mostly driven by price, and employed more than one million persons directly and indirectly. As average daily wages to the mainly female workforce remained below the national poverty line, the sector provided a livelihood but it did not contribute to women's empowerment.

In the fisheries sector, the available information was enough to conclude that increased fish export produced positive impacts on jobs, income, and poverty reduction. In 2004, there were 170,000 fishermen in Sri Lanka, and average earnings of a crew member in a multi-day fishing boat used for exports was six times more than that of a traditional fisherman, but both were well above the poverty line. A main factor in this development was the need to meet European Union food safety standards for fish imports.<sup>73</sup>

Overall, the impact evaluation concluded that laboratory upgrading projects can make a significant contribution to poverty reduction provided that such positive effects are taken into consideration during the design and implementation of the project.

Major **impact drivers** identified in the above Sri Lanka example and in the SMTQ thematic evaluation include: (i) the demand pull from consumers and lead importers (chains and major brands) for product quality and social standards and/or certification, as seen in the Sri Lanka and Bangladesh garment industry;<sup>74</sup> (ii) the need to comply with international food safety standards to secure export opportunities, as seen in the Sri Lanka fisheries sector; (iii) 'shock and bans', which refer to non-ability to comply with such standards, leading to import bans or self-imposed export bans causing actual or fear of sector-wide layoffs. This was a key driver for upgrading the quality infrastructure for the Bangladesh and Pakistan shrimp industry;<sup>75</sup> and (iv) systemic interventions on the basis of comprehensive national quality systems mapping and setting up national quality boards for better coordination. In addition, (v) the active engagement of stakeholders in the governance of the national quality system seemed to be important for maximizing impact and might be considered an impact driver.<sup>76</sup>

#### Contributions to non-economic dimensions of poverty - the human dimension

The SMTQ projects often affect dimensions of poverty other than the economic one, such as the human, political and socio-cultural dimensions, as described in

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<sup>73</sup> Ibid pages 30, and 33-35.

<sup>74</sup> Ibid page 29.

<sup>75</sup> Ibid page 30 and Brochure entitled 'Pakistan, Establishing Confidence in Competence. Trade Related Technical Assistance Programme, 2004-2007', UNIDO Intervention, Component 2, pages 13-14; and UNIDO.

<sup>76</sup> The inclusiveness in governance, for example, in the way national institutions reach out to client enterprises and other stakeholders were found in the Poverty Review (page 120) to be an important non-economic dimension of poverty reduction.

the Poverty Review.<sup>77</sup> This contribution of SMTQ projects to the human dimension of poverty reduction is explored further below.

The human dimension includes contributions to health (including workplace safety), nutrition, education, clean water, and shelter. Food safety projects that aim to protect the public from food-related health hazards constitute a large group of projects that help alleviate this dimension of poverty. The SMTQ thematic evaluation identified about 30 significant project interventions related to the food sector.<sup>78</sup> Also, the country evaluations of Rwanda and Mozambique included projects with important food safety components, but these projects were too early in their implementation to assess impact. To illustrate potential contributions to the health aspect of the human dimension in poverty reduction, the food safety activities of an SMTQ project in Rwanda are presented in Box 3.6.

Box 3.6: Food safety activities in Rwanda

In Rwanda, as part of a regional project, a number of activities were aimed to promote food safety. Outputs included campaigns on food safety and hygiene, leading to an annual food safety awareness campaign; creation of enquiry points on food safety in concerned government departments; upgrading of a chemical laboratory; new testing capacity at a microbiology laboratory, including detection of certain toxins and pesticide residues in agricultural products; and the selection of five enterprises to become ISO2000 / Hazard Analysis and Critical Control Points certified.<sup>79</sup>

In principle, the main underlying reason that food safety projects are undertaken is health concerns, and, therefore, health results should be included in the project impact. However, it would be interesting to see how impact will be eventually measured, because health benefits could be difficult and costly to track. . The intervention logic for a food awareness campaign, for example, would go through an extensive series of intermediate states before generating an impact; each state would be subject to assumptions related to, for example, peoples' trust in public information, the availability and affordability of 'safe' food, and the willingness and capacity (access to water or sanitation) of people to change general hygienic practices.

According to the SMTQ thematic evaluation, an important aspect of food safety projects was their tendency to focus on export food sectors and ignore domestic food safety, where export goods comply with high standards required by import

<sup>77</sup> Poverty Review, Annex 5, pages 120-122.

<sup>78</sup> TE SMTQ, page 21. Other project elements had spillover effects, but these will be listed in section (e) below.

<sup>79</sup> UNIDO (2011), Independent Evaluation, Rwanda, UNIDO Country Programme, pages 41-43 (henceforth referred to as CE Rwanda).

markets while accepting food safety risk in return for cheap food for the local market. The evaluation cited several such cases, but also reported that recent projects tended to address this issue.<sup>80</sup> For projects aiming specifically at improving food safety, it would be important, first, to include this in the intervention logic; second, to define impact indicators; and third, in spite of the difficulty, to assess the impact in future evaluations.<sup>81</sup>

Finally, the SMTQ thematic evaluation noted that SMTQ projects were in general designed on the assumption that an improved national SMTQ infrastructure would lead to export, but the evaluation found little evidence to that effect.<sup>82</sup> Thus, the existence of a quality infrastructure by itself does not prompt demand for 'quality' or the associated benefits.

Overall, the evaluations of the SMTQ projects concluded that more research is required on the relation between SMTQ efforts and poverty. However, based on the Sri Lanka case, it seems plausible that SMTQ may impact poverty if the intervention logic is designed around the poverty impact and reflected in the logframe. Specifically, target groups for poverty impact should be clearly defined; sub-sectors with a strong 'trade poverty-nexus' should be given priority; and potential impact drivers should be identified, pursued, and monitored. In this connection, the evaluation recommended that UNIDO develop and adopt a structured and in-depth approach for SMTQ project preparation, including clearly defined and consistently applied processes for project preparation across all SMTQ projects.<sup>83</sup>

#### **(e) Cluster and networking development projects**

This section will present the findings of a thematic evaluation of UNIDO's cluster and networking development (CND) initiatives as they relate to a contribution to MDG 1 along with examples from the country evaluation reports, as well as refer to recent initiatives by the Cluster and Business Linkages Unit.<sup>84</sup>

The thematic evaluation found that UNIDO's CND projects are generally relevant to recipient countries' priorities and effective in producing outputs. The thematic evaluation also found that not only were many outcomes achieved, particularly for

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<sup>80</sup> TE SMTQ, page 54.

<sup>81</sup> Health benefits with the character of spillover effects have also been identified; for example improved laboratories can help monitor the quality of drinking water from local wells

<sup>82</sup> TE SMTQ, page 80. The TE recognized the 'chicken and egg' situation.

<sup>83</sup> Ibid page 37.

<sup>84</sup> UNIDO (2010), Independent Thematic Evaluation, UNIDO Cluster and Networking Development Initiatives, (henceforth referred to as TE CND). The evaluation covered CND initiatives undertaken from 1994 to 2009.

the pilot clusters, but also several significant institutional outcomes attained, although data on institutional capacity development and creating an enabling environment were less systematic.<sup>85</sup> At the impact level, however, the evaluation noted that effects could not be documented with certainty, as anecdotal success stories at the pilot (micro) level could not demonstrate impact at the macro level.<sup>86</sup> It stated that, up to the time of the evaluation, there was no clear data to show that successful projects had translated into development impact at the country level.<sup>87</sup> The lack of data was ascribed to the lack of monitoring systems.

The CND thematic evaluation developed a model intervention logic for UNIDO CND country level projects presented in Figure 3.10 below, which demonstrates the evaluation's argument that poverty reduction at the regional or national level (along with greater competitiveness) can only take place after scaling up localized pilot projects.<sup>88</sup>

The thematic evaluation concluded that the effectiveness and impact of CND projects was strongly influenced by the local context, citing the following factors: (i) supportive local and/or national government; (ii) effective business support organizations; (iii) targeted clusters and networks that enjoy a degree of competitive advantage and work in areas with growth potential; (iv) existence of larger firms that offer the opportunity to develop the value chain; and (v) continued policy dialogue between government and CND projects, resulting in improved results.<sup>89</sup> These factors are interpreted as impact drivers.

The findings of the thematic evaluation for CND projects were validated in country evaluations of related projects in India (Cluster development) and Morocco (export consortia) as will be shown below.

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<sup>85</sup> Ibid page 32.

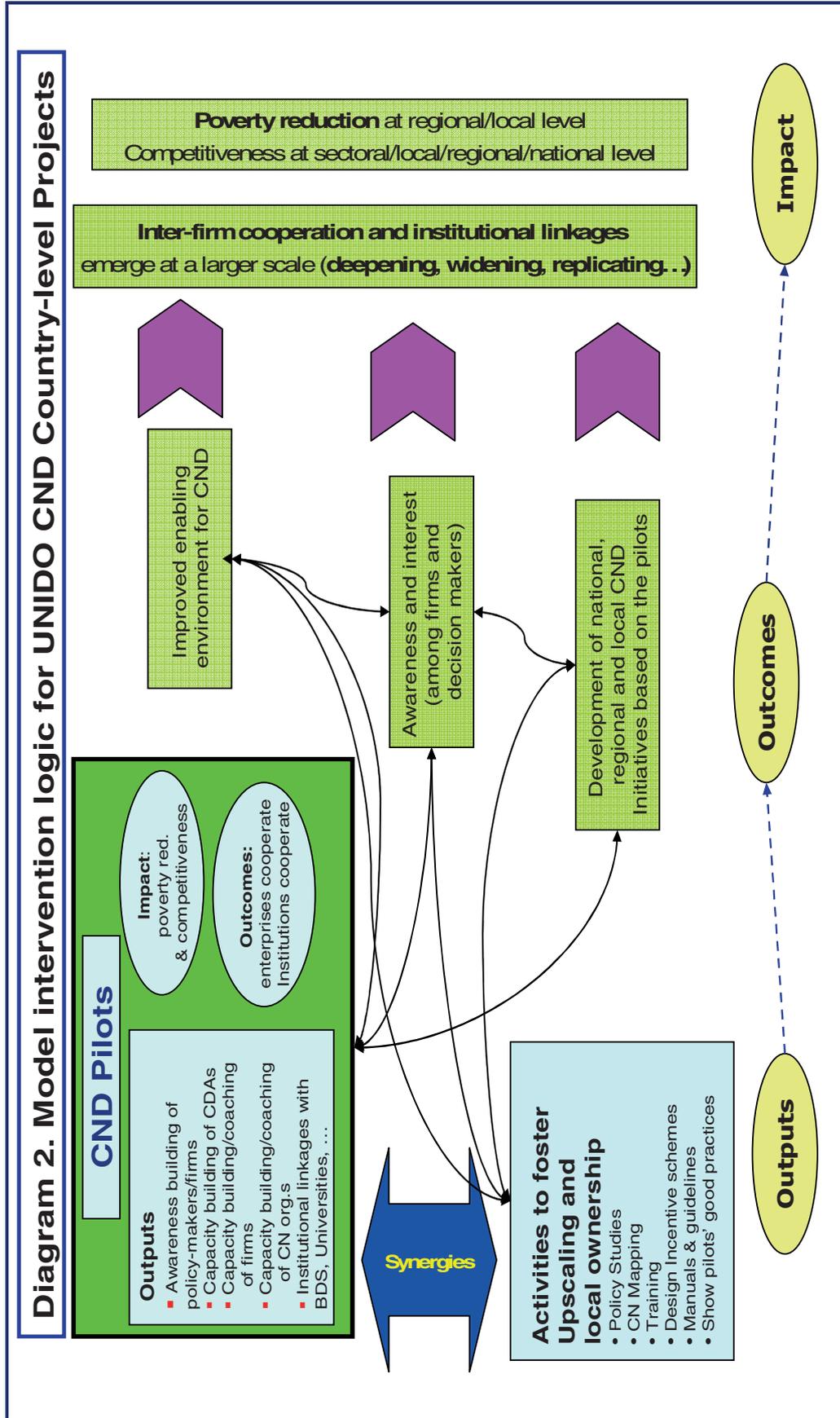
<sup>86</sup> Ibid page 32.

<sup>87</sup> Ibid page 32.

<sup>88</sup> Ibid Diagram 2, page 21.

<sup>89</sup> Ibid page 33.

Figure 3.10: Model intervention logic for CND country-level projects



The evaluation of the UNIDO Country Programme in India included an assessment of a large cluster development project which is as described in Box 3.7.

#### Box 3.7: Cluster development in Orissa, India

In Orissa, one of the poorest states in India, a CND project brought a fresh approach to cluster development in an area where many self-help groups and cooperatives already existed. The project combined policy advice with direct support to four clusters. The policy advice focused on encouraging the state of Orissa to include cluster development in its medium and small-scale enterprise policies and support initiatives. The support activities in the four clusters – stone carving, handloom, non-timber forest products, and light engineering – resulted in improved access to credit, product diversification, and market opportunities. At the impact level, it was suggested that cluster development support to the stone carving cluster helped increase sales, leading to monthly income increases of 400-500 Rupees for about 200 artisans. However, it was also reported that some of the poorest members of the cluster had not been able to benefit, for various reasons.<sup>90</sup>

Placing the example in the model intervention logic in Figure 3.10 shows how the project created synergies between developing pilot clusters and parallel policy advice. The example shows that a CND intervention, if successful, may lead to increased income among participating members. Theoretically, it may even have a ripple effect on the surrounding community. Unfortunately, owing to lack of monitoring systems, the country evaluation could not systematically assess the exact benefits for participating artisans and enterprises. The continued facilitation and organizational support by cluster development agents was found to be critical for this process.<sup>91</sup> Overall, the example highlighted the importance of scaling up CND initiatives beyond the pilot clusters.

It should be noted that CND projects that aim to promote clusters and linkages among enterprises to complement their individual capabilities and jointly achieve economies of scale are implemented under programme component C.1.2 Business, investment and technology services.<sup>92</sup> The general intervention logic for C.1.2 is added in Annex 11 for the sake of consistency.

CND projects that aim to form consortia of enterprises to gain export market access are implemented under C.2.4 Industrial export promotion and SME consortia in accordance with the general intervention logic featured in Figure 3.11.

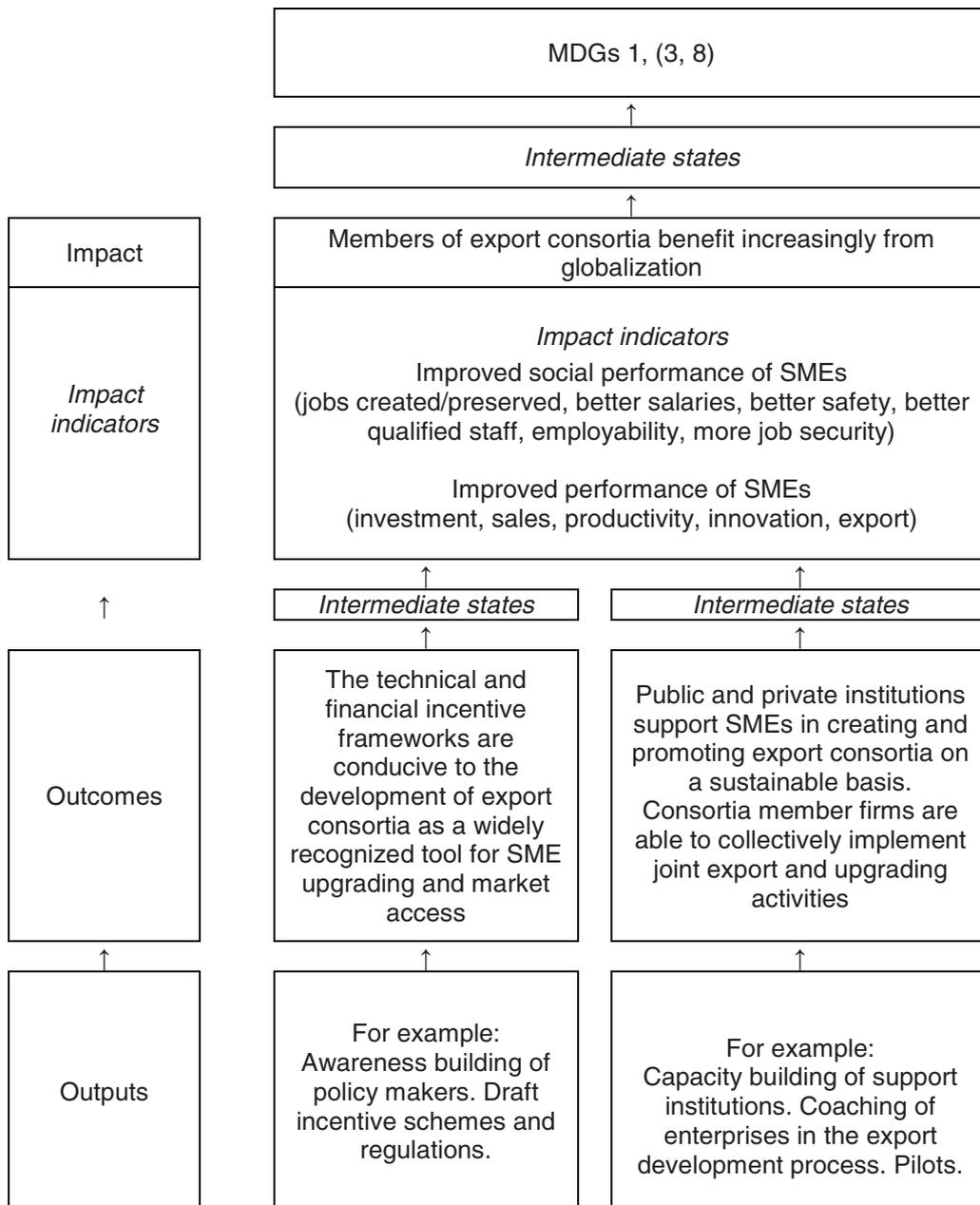
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<sup>90</sup> UNIDO, Independent UNIDO Country Evaluation, India, pages 58, 59, and 73 (subsequently referred to as CE India).

<sup>91</sup> Ibid page 68.

<sup>92</sup> PB 2012-2013, page 45. It was not meaningful to review the cluster projects against the general intervention logic for this much wider programme.

Figure 3.11: General intervention logic for SME consortia development<sup>93</sup>



<sup>93</sup> PB 2012-2013, page 57, with adjustments by staff of the Clusters and Business Linkages Unit.

Box 3.8 describes the export consortia project in Morocco.

#### Box 3.8: Export consortia in Morocco

In Morocco, the export consortia project successfully helped establish 21 consortia, covering nine sectors, with a membership of more than 120 enterprises. Most consortia were found in the textile, garment and food processing industries, other sectors being shoemaking, leather goods, building materials, automotive components, IT, and tourism. The enterprises had undertaken a variety of joint actions, from joint export initiatives and common procurement to collective negotiation of insurance tariffs. The benefits for participating enterprises differed according to the joint action: some may have increased market exposure and potentially increased sales while others may have saved costs. Typically, benefits could not be valued exclusively in financial terms. At the time of the thematic evaluation, a precise assessment of the benefits was not possible due to lack of monitoring systems.<sup>94</sup>

UNIDO later analysed the project, and estimated that the participating companies accounted for 14,000 jobs. The same analysis examined three consortia involving 21 companies with a total employment of 1,600. A detailed survey indicated that exports by members of the textile consortia had increased by 30 per cent, far higher than the compatible national average, and plausibly linked to consortia activities. Across all consortia, a dominant development was an increase in company visibility and improved reputation. To promote the formation of export consortia, the Moroccan government has provided various incentive schemes to new and existing ones.<sup>95</sup>

Reviewing this project example against the general intervention logic for export consortia in Figure 3.11, some plausible impact on the participating enterprises' export could be discerned but the impact varied and was influenced by many external factors. Improved job creation/preservation is one of the desired impacts according to the general intervention logic for SME consortia, but it was difficult to isolate the project contributions. Looking further toward the MDG 1 employment targets for Morocco, estimated employment gains could perhaps be compiled at the regional or sub-sector levels, but would require additional surveys and alignment with national statistical classifications to glean a possible contribution.

Underscoring the emphasis on pilot projects and the importance of undertaking more policy-oriented work, the thematic evaluation provided an interesting breakdown of the resource allocation among the portfolio of 70 CND projects. Of the total allotment of about \$31 million over the 1994-2009 period, most

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<sup>94</sup> TE-CND.

<sup>95</sup> UNIDO, *The Strategic Management of Export Consortia: An analysis of the experience of UNIDO in Morocco, Peru, Tunisia and Uruguay*, 2009, pages 24-41.

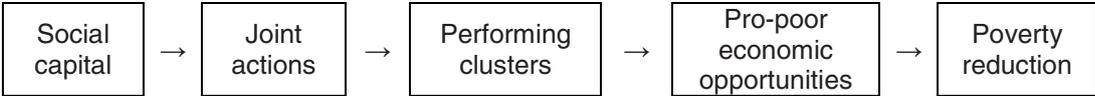
resources were allocated to pilot projects (49 per cent), less to projects for scaling up (34 per cent), and just 3 per cent for policy development.<sup>96</sup> This relationship was explained by the fact that the CND concept was being developed and driven by country demand during those years.

Key recommendations of the thematic evaluation included that (i) project documents should indicate explicitly how the scaling-up or replication of pilots would take place; and (ii) monitoring systems should be improved to capture results of the pilot clusters.<sup>97</sup>

**Recent initiatives by the Cluster and Business Linkages Unit**

The Cluster and Business Linkages Unit has developed a causal chain for cluster initiatives. It has also introduced a pro-poor approach by defining four categories of poor direct and indirect beneficiaries, namely poor entrepreneurs; poor workers and job-seekers; poor suppliers and farmers; and poor consumers of cluster goods and services; the Unit expanded the causal chain to emphasize pro-poor targeting, as shown in Figure 3.12.<sup>98</sup>

Figure 3.12: Causal chain for pro-poor cluster development



The underlying causality is that promoting joint actions will lead to improved cluster performance, which in turn will lead to improvements in the economic situation of poor beneficiaries, and thereby contribute to poverty reduction.<sup>99</sup> The conditions required to move from one state of the causal chain to the next is explained in a newly developed monitoring manual.<sup>100</sup> For example, to move from the state ‘*performing clusters*’ to ‘*pro-poor economic opportunities*’, the manual lists 22 assumptions and risks that must be met or mitigated.<sup>101</sup> Table 3.2 presents an extract relating to the category of poor entrepreneurs.

<sup>96</sup> TE CND, page 27.

<sup>97</sup> TE CND, pages 48 and 52.

<sup>98</sup> Cluster and Business Linkages Unit: Unpublished PowerPoint presentation entitled ‘The UNIDO cluster approach’, slides on page 8.

<sup>99</sup> Ibid slides on pages 1 and 7. Terminology in some slides is not fully consistent with the monitoring manual.

<sup>100</sup> Cluster and Business Linkages Unit: Manual for Monitoring Framework (un-dated draft). The Manual is being up-dated as of June 2012, and is now entitled ‘Monitoring Guidelines and Tools for Pro-poor Cluster Initiatives’.

<sup>101</sup> Ibid pages 13-20.

Table 3.2: From cluster performance to pro-poor impact for poor entrepreneurs

<b>Assumptions and risks for poor entrepreneurs</b>	
IF.....	Cluster performance improves
AND assumptions are met	<ul style="list-style-type: none"> <li>✓ Women entrepreneurs and other poor stakeholders have control over profits and have the freedom to decide on re-investments and spending.</li> <li>✓ Taxes that private companies pay are used by government to increase the delivery of basic services such as health and education.</li> <li>✓ Investment levels to enter in the business or expand activities are not too high or risky to be borne by entrepreneurs that have limited asset endowments.</li> <li>✓ Trade policies and regulation support the effectiveness of joint purchases and marketing practices.</li> <li>✓ Local norms and institutions allow disadvantaged stakeholders (e.g. women entrepreneurs) to control profits or invest them in developing their business or engage in entrepreneurial activities on a full-time basis.</li> <li>✓ Business owners have opportunities for exposure (travel, business contacts, etc.) that increase their leadership skills and self-esteem and thus acquire the capacity to voice their needs and participate in decision-making.</li> <li>✓ Services provided by local institutions remain acceptable/affordable and available for cluster firms, above other potential clients.</li> </ul>
AND risk is mitigated	<ul style="list-style-type: none"> <li>✓ The growth of overarching firms roots out employment and self-employment opportunities in less competitive or informal business in the cluster.</li> </ul>
THEN	<ul style="list-style-type: none"> <li>✓ Capabilities are enhanced – and poor entrepreneurs can take advantage of economic opportunities.</li> </ul>

Similar assumptions were developed for other poor beneficiary categories. In addition to these assumptions, there are context-specific impact drivers. The many assumptions and impact drivers demonstrate that there are many possible pathways from the state of ‘performing clusters’ to the state of ‘poverty impact,’ and illustrate the complexity of measuring CND project contributions to MDG 1. The same monitoring manual provides project key performance indicators, extensive examples of impact indicators – including the DCED standard indicators and specific pro-poor indicators, along with guidance for their monitoring.<sup>102</sup>

In summary, the CND projects have a vast potential for contributing to MDG 1; however, intervention logics may follow complex pathways. A competitive edge of the cluster at the outset and effective business support organizations are

<sup>102</sup> Ibid pages 52-82, Up-dated Manual Appendices 2 and 3, pages 51-64.

important impact drivers. The multiplication of project benefits beyond the pilot remains a challenge.

### **(f) and (g) Contributions to MDG 1 from energy and environment projects**

In addition to environmental benefits, several evaluation reports noted actual or potential income or employment benefits resulting from environment and energy projects. Their contribution to MDG 7: 'Ensure environmental sustainability' will be examined in Chapter 3.3, but their possible contribution to MDG 1 will be assessed here. The projects are presented under two headings, namely (f) small-scale hydro power projects that may lead to economic benefits in rural areas, and (g) environment projects in general that either by design or as a spillover effect may contribute to increased employment or income.

#### **(f) Small hydro power projects**

Poor infrastructure – especially lack of access to electricity in rural areas – is a common barrier for establishing, expanding or improving the performance of cottage industries and SMEs. The introduction of small hydro power (SHP) is envisaged to alleviate this situation and is a component of the PB Programme Component C.3.3: 'Clean energy access for productive use.' A thematic review of UNIDO's SHP projects assessed SHP projects in six countries.<sup>103</sup> The review found that – with a few exceptions – the SHP programme had shown limited impact. There were several reasons: Chiefly, the interventions seemed to assume that SHP development by itself would trigger industrial development, but the review did not observe any significant degree of productive use in any of the pilot sites, and in practice, the programme focused on rural lighting.<sup>104</sup> Also, the SHP projects were based on donated turbines, and often delivered without the necessary 'packaging' of planning, feasibility studies, and local capacity building.<sup>105</sup>

These findings can largely be explained by observing a tentative logframe for UNIDO SHP activities constructed for the thematic review and which is reproduced below in Figure 3.13.<sup>106</sup> The logframe shows the expected chain of results from the demonstration plant output ('SHP demonstration plant and electricity distribution systems are planned, designed and constructed') to impact ('SHP contributes to rural industrialization'). The chain of results could follow different paths depending on the nature of the project in question.

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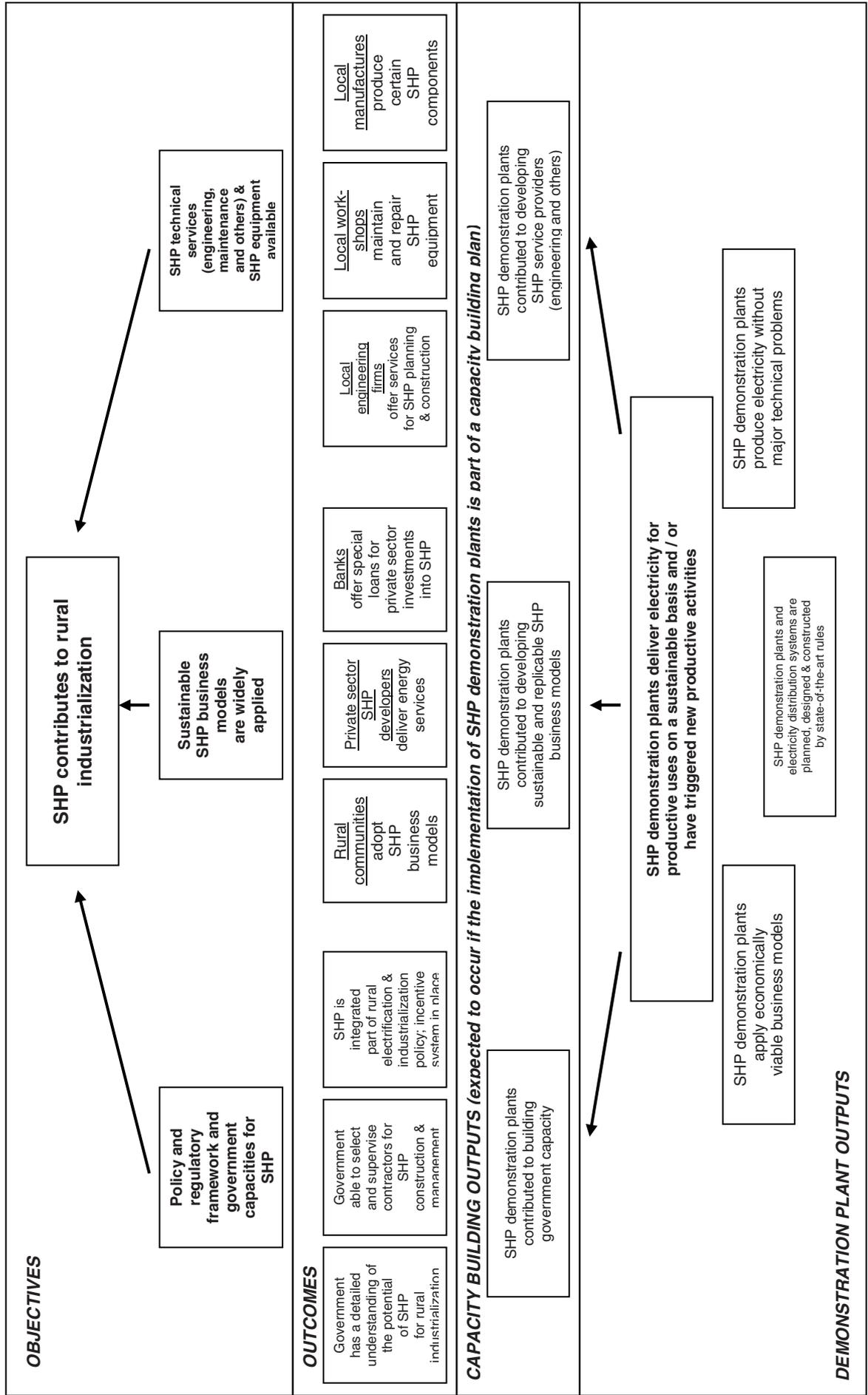
<sup>103</sup> Independent Thematic Review, UNIDO Projects for the Promotion of Small Hydro Power for Productive Use. (Henceforth referred to as TR SHP).

<sup>104</sup> TR SHP, page 12.

<sup>105</sup> Ibid page 13.

<sup>106</sup> TR SHP, Figure 2.1, page 10.

Figure 3.13: Tentative reconstruction of a logframe for SHP activities



The country evaluations reports cover several SHP projects; one in Rwanda is summarized in Box 3.9.

#### Box 3.9: Small hydro power plants in Rwanda

Rwanda was the most extensive partner of the SHP programme, and the government integrated the SHP programme into its proactive electrification and renewable energy policy. In 2008, the thematic review found that the four SHP plants in Rwanda had demonstrated the viability of SHP and that the government planned to expand the use of SHP. The review also noted that only a limited share of the electricity produced was used for productive purposes.<sup>107</sup> In 2011, a UNIDO country evaluation corroborated these findings explaining that about 26 SHPs were in operation or under construction. It observed that communities around the original four pilot SHP sites had been energized with more people setting up a business.<sup>108</sup>

When applying the logframe to the case in Rwanda, the approach demonstrated that the SHP project was consistent with government policies and it became an integrated part of the rural electrification policy, local communities accepted and adopted the model, and the programme generated appreciable local engineering and construction services.<sup>109</sup>

In Nigeria, a UNIDO country evaluation assessed a cluster of SHP projects, and concluded that only little, slow or scattered impact had been achieved to date, although a comprehensive approach was followed, involving the establishment of a technical centre for SHP, technology transfer for local manufacturing of certain SHP turbines and components along with the construction of several SHP plants.<sup>110</sup>

The pathway from pilot plant to impact could also be observed on the basis of the general intervention logic programme component C.3.3: 'Clean energy access for productive use,' as presented in Figure 3.14 derived from PB 2012-2013.

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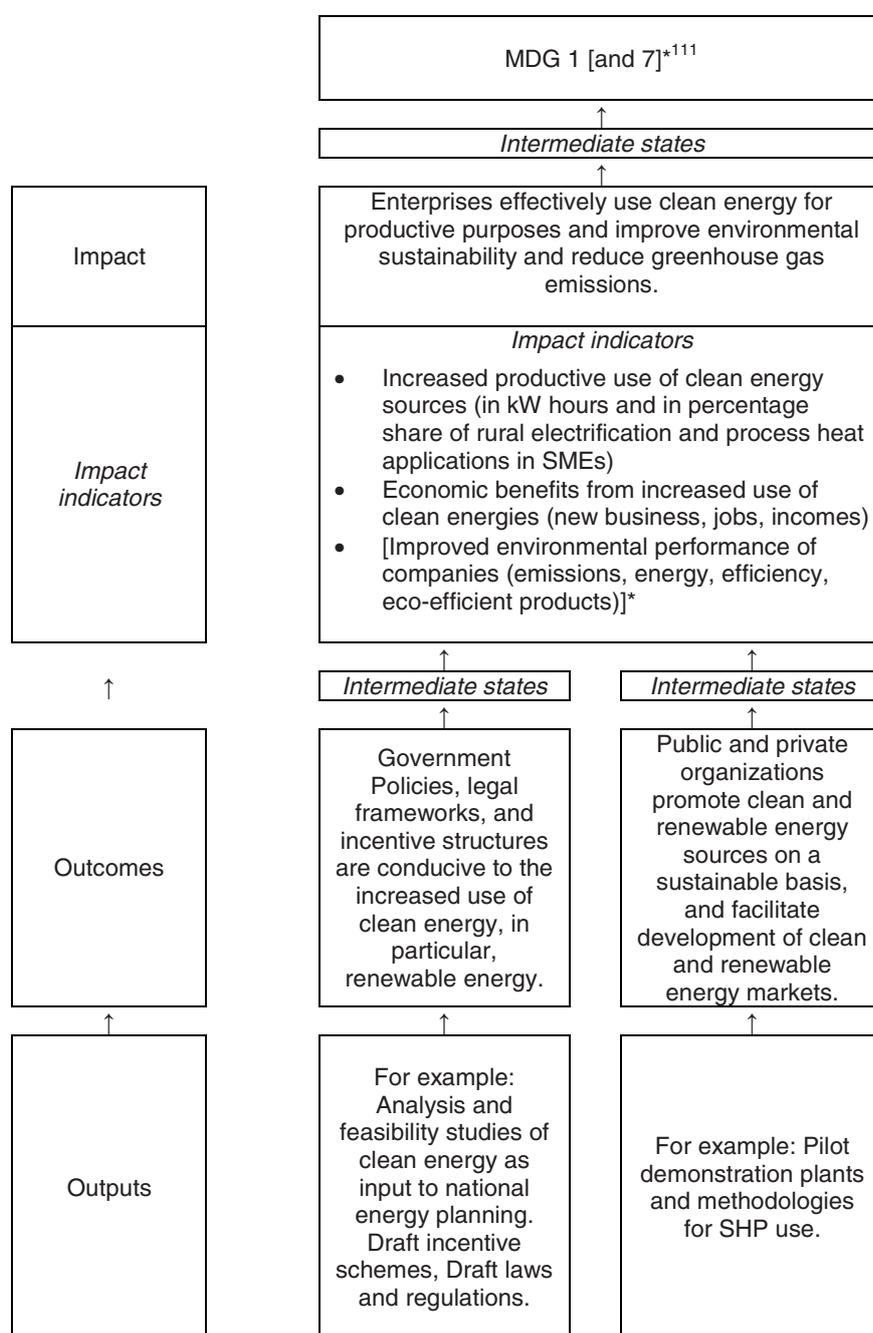
<sup>107</sup> Ibid page 72.

<sup>108</sup> CE Rwanda, page 46.

<sup>109</sup> Ibid page 72.

<sup>110</sup> UNIDO, Independent evaluation, Federal Republic of Nigeria, Country Evaluation, pages 56-58, 61-65 and 93-94. (Henceforth referred to as CE Nigeria).

Figure 3.14: General intervention logic for clean energy access for productive use



The intervention logic illustrates that the pathway to impact – and to MDG 1 – is two-pronged; combining policy outcomes (SHP become part of the rural electrification strategy) and institutional outcomes (public and private organizations promote SHP). As shown in the logframe in Figure 3.13, factors such as ‘rural communities adopt SHP’, ‘banks offer loans for SHP’, and ‘local

<sup>111</sup> \* denotes that this aspect will be covered in Section 3.3 (b) below.

distribution systems reach SMEs' further add to the complexities. Such factors could also be considered as assumptions and impact drivers. The long intervention logic and complex pathway underscores the necessity of a pre-defined strategy for scaling up activities beyond the pilot demonstration plants. As shown in the case of Rwanda, all these elements can come together and lead to benefits for the targeted communities.

In order to demonstrate contribution to MDG 1 from SHP projects, impact indicators would need to be defined. In this regard, the general intervention logic suggests several indicators related to the economic benefits of SHP. Furthermore, surveys should be conducted (post project) to verify improvement for end-users, particularly micro-enterprises and SMEs. For example, in Rwanda, the exact effects (productive activities, environmental sustainability, employment, social benefits of lighting, etc.) would need to be assessed, preferably also compared with the situation in other villages, to ascertain that changes can be attributed to the availability of power rather than to other factors (higher prices for agricultural produce, general economic growth, credit transfers, etc.).

The SHP programme is thus an example of a programme where a potential to contribute to MDG 1 exists but where additional research is needed.

#### **(g) Environment projects**

Several projects in the environmental area were found to have a positive impact (actual or potential) on MDG 1. Examples are presented below.

##### **Box 3.10: Methyl-bromide phase-out in tomato production in Morocco**

A series of MP projects, implemented in Morocco between 2001 and 2011, aimed to phase out methyl-bromide in tomato production and succeeded not only in eliminating the methyl-bromide but also in securing the continued growth of tomato production and export. The impact drivers may be listed as follows: threats to the industry by ban of a critical pesticide coupled with reluctance of importers to purchase tomatoes grown with methyl-bromide; and a multi-faceted approach involving technology transfer, training, awareness building, and creating synergies among nurseries, technology centres and farmers.<sup>112</sup>

Being primarily an environment project, the assessment of methyl-bromide phase-out focused mostly on the environmental aspects, and little data were collected on number of jobs secured and income levels increased. To fully account for the contribution to MDG 1, such data would be required. Another

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<sup>112</sup> CE Morocco, pages 60-65, and UNIDO Project Brochure: 'Parting with a harmful foe.' The environmental achievements of this project are described in Section 3.1.3 (a) below.

example of potential MDG 1 contribution is a project in Tanzania, as described in Box 3.11.

#### Box 3.11: Biogas from sisal fibre waste in Tanzania

In Tanzania, a pilot project for the cleaner and integral use of sisal processing waste effectively demonstrated the technical and financial feasibility of turning sisal residue into biogas, thereby reducing water pollution and confirming that sisal fibres can be produced under environmentally sound conditions. This opens the way for expanding this sector, and prompted the Tanzania Sisal Board to consider large-scale expansions of sisal fibre production over the next 15 years, stimulating investments in sisal farming and potentially engaging more than 100,000 families in agricultural operations by 2025.<sup>113</sup>

In the Tanzania case, the project pathway from the pilot project to the full impact is long and complex: there has to be dissemination and upscaling in order to generate secondary developmental effects; and many assumptions need to be met and impact drivers in place before a contribution to MDGs 1 can be realized. However, the successful pilot played an important role in identifying opportunities.

To fully appreciate the magnitude and character of the contribution of environment projects to MDG 1, these benefits would need to be part of the project intervention logic and results need to be monitored beyond the project life-time.

#### **(h) Conclusion on MDG 1: Eradicate extreme poverty and hunger**

The review of evaluation reports and associated intervention logics showed that UNIDO projects can contribute to MDG 1 through their expected impact on employment creation (or job preservation) either directly or indirectly through their impact on the economic performance of enterprises. Projects typically follow a pathway via institutional and/or policy outcomes making the contribution indirect, and numerous external factors (impact drivers, assumptions, and risks) play a role in generating employment in the target enterprises and/or among persons becoming self-employed in micro-enterprise activities. Often, intervention logics are interlinked with national planning frameworks that help clarify the overall pathway from project output/outcome to national MDG 1 targets.

With respect to the programme components reviewed, findings on the intervention logics can be summarized as follows:

The agro-industrial and CND projects reviewed generated some anecdotal and/or potential contributions, mostly at the pilot level. At the aggregate (macro) level,

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<sup>113</sup> CE Tanzania, pages 34-35, and 39-41.

intervention logics were long and often with multiple counterparts and/or stakeholders in different project locations. The scaling-up from pilot to full-scale interventions has been a challenge.

The review found that ECP projects may have a large potential to systematically contribute to thousands of young people establishing micro-enterprises and improving their livelihood. The intervention logic was relatively short, but in order to sustain long-term impact (e.g. business survival and growth), business development services and financing needs to be present as well as a market for the products or services offered.

Also the post-crisis job training projects had a direct impact on employment and the livelihood of trainees. The evaluation was able to quantify results within some margin, but did not compare livelihood outcomes with national poverty lines. While balancing the short and long-term needs, a strategy would be required to scale up from the pilot group (targeting about 2,000 vulnerable families) to achieve a wider impact for the approximately 100,000 vulnerable families in the targeted region.

With respect to SMTQ projects, a plausible link was found between the improvement of calibration services and testing laboratories and client enterprise export performance, which, in turn, among other factors, may have positively impacted the employment situation in the sectors concerned. With the approach, such projects have the potential to indirectly help preserve or establish hundreds or even thousands of jobs. In addition, some SMTQ projects aimed at improving food safety, thereby contributing to better public health, which is a non-economic aspect of poverty reduction.

Although not covered in the evaluation reports, some upgrading projects may result in actual job losses in the effort to improve enterprise competitiveness. In such cases, complementary measures may be called for; for example, labour force retraining in order to alleviate such negative effects.

Energy and environment projects can also generate employment effects. Some SHP projects were found to have an employment generation potential when integrated into national energy plans, accepted by local communities and distribution network established to micro or small enterprises. However, more monitoring and research was required to understand the actual and potential employment benefits. Successful biogas pilot plants, such as the use of sisal processing waste for biogas in Tanzania, lays the foundation for future employment creation. But the actual effect will depend on a wide range of factors. Methyl-bromide phase-out on Morocco's tomato production showed how shifting

to new technologies and practices not only preserved jobs but helped expand the sector. It should be noted that this was achieved over a 10-year period.

A crucial factor is the scaling up from pilot to full scale. Results were generated at the pilot level, and possibly the time required for impact to occur had not been taken into account, but the lack of strategies was a recurrent comment in many evaluation reports. The move from pilot to full scale is also not obvious. In the case of the ECP in Mozambique, the successful scaling-up was, among other factors, ascribed to keen government interest, and opportune timing in relation to government educational reforms. Can lessons be learned from successful cases?

With respect to **indicators**, the impact indicators defined in the PB programme structure systematically include employment generation, which feeds into the indicators for MDG 1 Target B: 'Achieve full and productive employment and decent work for all'. At the project level, however, evaluation reports could seldom access data to verify the expected and intended employment results. This could be because many evaluations took place towards the end of the projects before full impact was achieved. At the same time, evaluation reports often noted the absence of monitoring systems and only a few ad-hoc surveys took place to take stock of project outcomes and impact achieved. For projects with a focus on a particular manufacturing sub-sector or region, the employment results may show up in national statistics, and if indicators are compatible, tracking impact is easier.

The MDG 1, Target B, calls for '*decent* work for all'. The element of '*decent*' could not be examined in detail but there were cases where projects resulted in improved work safety and better working conditions.<sup>114</sup>

With respect to **impact drivers** and other factors important for achieving impact, the most commonly referred to were: demand for end-products and conducive market conditions, effective business support services, and threat of job losses. Also demand/pull factors related to end-consumer demands for decent working conditions in export factories were found to be a strong impact driver. In applying a value-chain approach, the Agri-business Division identified infrastructure and additional private sector investment as important drivers, and is establishing alliances at the central or regional level with partners that could help promote these. With regards to CDN projects, the Clusters and Business Linkages Unit has mapped potential risks and assumptions for different stages of the intervention logic and for different categories of poor target beneficiaries, thereby

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<sup>114</sup> This aspect was referred to in the UNIDO TR on Poverty, pages 15-16. It has been analyzed in the following paper: UNDG (Un-dated) Thematic paper on MDG 1 Eradicate extreme poverty and hunger, Section B.

enabling project partners to deal with these in a systematic manner. A summary of the findings are provided in Table 3.3 below.

Table 3.3: MDG 1 – Summary of findings

<b>MDG 1: Eradicate extreme poverty and hunger</b>	
<b>Target 1.B: Achieve full and productive employment and decent work for all including women and young people</b>	
<b>MDG Indicator</b>	<b>UNIDO projects and findings</b>
<p>MDG Indicator 1.5: Employment-to-population ratio</p>	<ul style="list-style-type: none"> <li>• Agro-industrial projects,</li> <li>• CND projects,</li> <li>• SMTQ projects through indirect effects on manufacturing sectors.</li> </ul> <p>Some, mostly unsystematic, contributions to employment generation were captured in evaluations. Vast potential noted. Long intervention logics from project outcome to impact with many external factors.</p> <p>Magnitude of contribution from agro-industrial and CND projects would mostly depend on scaling up successful pilot results.</p> <p>Magnitude of contributions could in many cases be tracked in national employment statistics, if indicators were compatible and monitoring systems in place.</p>
<p>MDG Indicator 1.6: Proportion of employed people living below \$1 (PPP) per day</p> <p>MDG Indicator 1.7: Proportion of own-account and contributing family workers in total employment</p>	<ul style="list-style-type: none"> <li>• ECP projects,</li> <li>• Post-crisis job training,</li> <li>• CND and other micro-enterprise or entrepreneurship development projects.</li> </ul> <p>Relatively shorter intervention logics, hence more direct impact, but long-term sustainability depends on a variety of factors.</p> <p>Post-project surveys may help confirm and quantify impact, especially when impact occurs in informal sector, which is not covered in national statistics or other data.</p>

## 3.2 Project contributions to MDG 3: Promote gender equality and empower women

MDG 3 concentrates on gender equality in education and defines indicators related to education, employment, and national decision-making.

MDG 3 Target	MDG Indicators
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament

UNIDO seeks to contribute to MDG 3 through programme component C.1.4 'Women and youth in productive activities', including the Women Entrepreneurship Development (WED) projects, as well as through gender mainstreaming in other projects. These efforts may affect women's employment opportunities as measured by indicator 3.2. Additionally, other projects without explicit gender mainstreaming may affect women employment in the non-agricultural sector. This section will explore whether evaluation findings identified contributions to MDG 3 from, first, WED projects, and, second, from projects implemented under other programme components with or without gender mainstreaming.

### (a) Women entrepreneurship development projects

The evaluation reports under review contained the following: in Burundi, one project with a WED component, and in Morocco, one WED project. These are briefly described in Boxes 3.12 and 3.13 below.

#### Box: 3.12: Women entrepreneurship development in Burundi

In Burundi, a project for the promotion of micro and small enterprises and SMEs included a component targeting women entrepreneurs. The project aimed to set up a central support unit, provide technology advice, business management training, marketing support, including special attention to women entrepreneurs, leading to 20 operational businesses. At the time of the evaluation in May 2010, about 60 persons had been trained, but there was no gender-disaggregated data. The evaluation team found that little follow-up had been offered to the trainees, and the long-term impact of the training could not be assessed.<sup>115, 116</sup>

<sup>115</sup> UNIDO, 2010, Evaluation independante, Burundi, Evaluation-pay des activites de l'ONUDI en Republique du Burundi, pages 30-32, (henceforth referred to as CE Burundi).

### Box 3.13: Women entrepreneurship development in Morocco

In Morocco, a project targeted women entrepreneurs in agro-industries. Considered a model intervention, the project helped form three groups producing olive oil, dried fruit, and traditional tapestry respectively. The olive oil production engaged about 243 women; the number of participating women in the other groups was not reported. Owing to difficulty in implementation, the expected outcomes were not fully reached. Although the olive oil units had obtained 'bio' certification, they lost their only export customer and sold oil locally in bulk at inferior prices. The dried fruits became too expensive to compete in export markets, and the tapestry group encountered problems with the looms. The evaluation stated that although the groups showed significant progress since phase I (2004-2007), and participants showed continued strong commitment, all groups faced weak utilization of production capacities, poor market demand, and potential organizational problems in one group, resulting in mixed results.<sup>117</sup>

In the absence of post-project data and without clear project strategies or logframes, the review resorted to analysing the project according to the general intervention logic for UNIDO programme Component C.1.4 'Women and youth in productive activities.' This intervention logic follows the structure provided in the PB 2012-2013 and presented in Figure 3.15.<sup>118</sup>

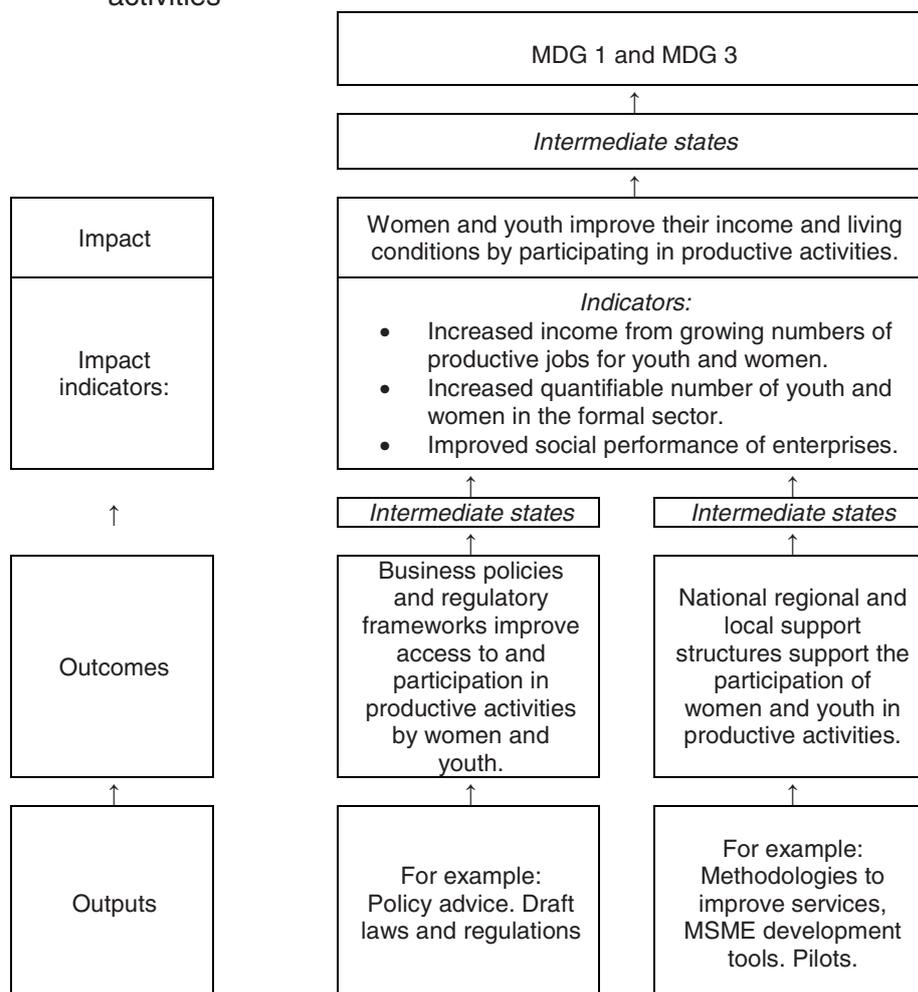
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<sup>116</sup> Strictly speaking the project may not be a WED project, but the gender aspect is sufficient to be considered as such. It is appreciated that a county evaluation cannot go into the same depth as a project evaluation, and more data may be available to shed light on further results.

<sup>117</sup> CE Morocco, pages 25-31.

<sup>118</sup> PB, 2012-2013, (document IDB.39/13/Rev.1), Expected contribution to impact and country-level outcomes as well as performance indicators are those listed in the PB text pages 47-48.

Figure 3.15: General intervention logic for 'Women and youth in productive activities'



The two projects seemed to follow the path of delivering pilot demonstrations and strengthening local support structures, and possibly they are in intermediate states between outcomes and impact. The Burundi evaluation reckoned, however, that the project would have limited impact,<sup>119</sup> and the Morocco evaluation recommended that the project be extended to resolve the implementation issues and address the risk factors.<sup>120,121</sup>

The two cases demonstrate that assessing projects for MDG contributions requires available data on number of end-beneficiaries, and their situation at the time of the end of the project/ evaluation (SME profits, employee wages, both factors compared with poverty lines or other relevant national bench mark – e.g. male entrepreneurs in similar conditions).

<sup>119</sup> CE Burundi, page 32.

<sup>120</sup> CE Morocco, page 31

<sup>121</sup> In both cases, the role of the national support structures is uncertain.

### **Compatibility of indicators**

A comparison between the impact indicators used in the UNIDO general intervention logic with MDG Indicator 3.2 ‘Share of women in wage employment in the non-agricultural sector,’ reveals some ambiguity in the UNIDO indicators. The first impact indicator of the UNIDO intervention logic refers to income from growing numbers of *productive jobs* for women and youth. If ‘*productive jobs*’ means *wage employment*, then the indicator is compatible with the MDG 3 indicator. However, if ‘*productive jobs*’ means women gaining an income from being self-employed (entrepreneurs) – which is typical in WED and micro-enterprise projects – then the indicator is not compatible with the MDG 3 indicator. In this case, rather, ‘*productive jobs*’ would be compatible with MDG 1, Indicator 1.7 ‘Proportion of own-account and contributing family workers in total employment’.

The second impact indicator of the UNIDO general intervention logic, ‘Increased quantifiable numbers of women in the *formal sector*’, can be interpreted as ‘women in formal *wage employment*’, which would be compatible for the MDG 3 indicator (Wage employment), or as ‘women-owned *enterprises graduated from the informal sector to the formal sector*’, which would be compatible with MDG 1 (working for own-account). Depending on the interpretation of UNIDO’s first and second impact indicators, projects could be classified as potentially contributing to MDG 1 or MDG 3, or both.

The third impact indicator in the intervention logic, ‘improved social performance of enterprises,’ has no corresponding indicator in MDG 3, but could be compatible with MDG 1, Target 1.B, which refers to ‘*decent work for all*’. The UNIDO intervention logic contains no indicator to measure the increased level of empowerment experienced by the female target population, but in any case, this would not lead directly to the MDG 3, Indicator 3.3 ‘Proportion of seats held by women in national parliament’.

Overall, typical WED projects and other projects under programme component C.1.4 would seem to contribute mainly to MDG 1, Target B: ‘Achieve full and productive employment and decent work for all, including women and young people.’

#### **(b) Other projects**

Projects implemented under other programme components may contribute to MDG 3 due to gender mainstreaming or as a spillover effect. Unfortunately, almost all evaluation reports noted the absence of gender mainstreaming in the

projects being assessed. The thematic review of agri-business/agro-industry development interventions did not cover gender aspects, but the recently developed pro-poor value-chain development guide does contain a chapter on gender.<sup>122</sup> The thematic evaluation of the CND initiatives also did not cover gender mainstreaming, but many clusters may have included women entrepreneurs or sectors with a large female workforce. The Manual for the monitoring framework in this area equally focused on ‘poor’ without reference to gender. Hence, there is no apparent, or recorded, contribution to MDG 3.

At the same time, many reports discussed gender perspectives in one way or the-other and projects may contribute to MDG 3. Some examples are provided in Table 3.4 below.

Table 3.4: Gender perspective in selected projects and country project portfolios

Project	Comments on gender perspectives
1. Post-crisis job training project in Iraq (see Box 3.4 )	<ul style="list-style-type: none"> <li>• 63% of trainees were women (higher than the 50% target).<sup>123</sup></li> <li>• Number of female trainers was not reported.</li> <li>• Number of women employed post-training was unclear as data were not gender disaggregated.</li> <li>• Unemployment was higher in trades dominated by women (food, sewing, and weaving), but no clear data exist.<sup>124</sup></li> <li>• Project evaluation did not cover gender aspects systematically.<sup>125</sup></li> <li>• Unclear whether gender mainstreaming was attempted.</li> </ul>
2. SMTQ projects in Sri Lanka (see Box 3.5)	<ul style="list-style-type: none"> <li>• Projects presumably gender neutral; however, dominant workforce in two sectors was largely female (285,000 in garment sector and several hundred thousand in tea estate sector).</li> <li>• Indirect positive effects on employment conditions in garment sector owing to impact drivers external to the project, namely end-consumers’ demanding garment produced under descent labour conditions.</li> <li>• No effects in tea sector, as no one seemed to be concerned.</li> <li>• Impact evaluation demonstrated unintended positive effects and missed opportunities.</li> </ul>

<sup>122</sup> UNIDO, Pro-poor value chain development, 25 guiding questions for developing and implementing agro-industrial projects, chapter 3.5, pages 39-41.

<sup>123</sup> PE Iraq, page 25.

<sup>124</sup> Ibid pages 35-37.

<sup>125</sup> It is not known to this review if and how gender was covered in the project document.

<p>3. Entrepreneurship Curriculum Programme in Mozambique (see Box 3.3)</p>	<ul style="list-style-type: none"> <li>• 47% of all students female (given by enrolment ratio).</li> <li>• Gender balance in curriculum material and in teachers' training.</li> <li>• 41% of female students started micro-business compared with 37% of male students.</li> <li>• Gender mainstreaming observed in implementation and reporting.<sup>126</sup></li> </ul>
<p>UNIDO project port-folio in Tanzania<sup>127</sup></p>	<ul style="list-style-type: none"> <li>• Government adopted gender equality policy.</li> <li>• Country evaluation found positive signs of gender mainstreaming in the form of some gender disaggregated reporting formats and the presence of women among target beneficiaries.</li> <li>• The cashew processing unit was not found to cater to the needs of the predominant female workforce.</li> <li>• Teachers' guide and student materials for the entrepreneurship curriculum programme had no gender reference.</li> <li>• The Tanzania Women Chambers of Commerce was previously supported by a UNIDO SME project. In 2008, its representatives participated in a regional workshop under project YA/RAF/08/015. Three years later, at the time of the evaluation, the association harboured 5 professional associations, 20 companies, and 2,000 individual members.</li> <li>• The evaluation concluded that gender mainstreaming in the UNIDO project port-folio is visible, but not systematic enough, and that opportunities are missed, thus depriving projects of potential gender-driven impetus and probable development impact.</li> </ul>

The above examples show mixed results but indicate that projects with explicit gender perspective do produce gender benefits. Seemingly gender neutral projects may generate large gender-specific impact, and even small efforts may lead to significant impact. Lack of gender dis-aggregated reporting means that gender effects are unknown and positive impact could be under-reported. In none of the cases was it possible to deduct quantifiable data for reporting towards any of the MDG 3 (or MDG 1) indicators.

Finally, UNIDO, through its mandate in manufacturing statistics, has the potential to provide data on MDG 3, Indicator 3.2 (Share of women in wage employment in the non-agricultural sector). UNIDO could capitalize on this potential mandate.

<sup>126</sup> Project document, project summary sheet, and data from project manager.

<sup>127</sup> Comments based on CE Tanzania, pages 58-60.

**(c) Conclusion on MDG 3: Promote gender equality and empowerment of women**

Against this background, it seems that UNIDO WED projects may potentially contribute to MDG 1 rather than to MDG 3 when strictly applying Indicator 3.2 (share of women in *wage employment*). A clarification in the UNIDO impact indicators for programme component C.1.4 could help make this distinction. Other projects – irrespective of gender mainstreaming – may influence wage employment of women. Government gender equality policies help to encourage gender mainstreaming in UN projects; and, at times, modest inputs can produce positive results. In all cases, interventions have a long causal chain before impact may become visible in national statistics. Overall, more information, specific targets, and more analysis are required to ascertain potential positive project contributions to MDG 3.

### 3.3 Project contributions to MDG 7: Ensure environmental sustainability

MDG 7 embraces the benefits of environmental sustainability by protecting environmental resources, preserving biodiversity, and improving people's basic living conditions.

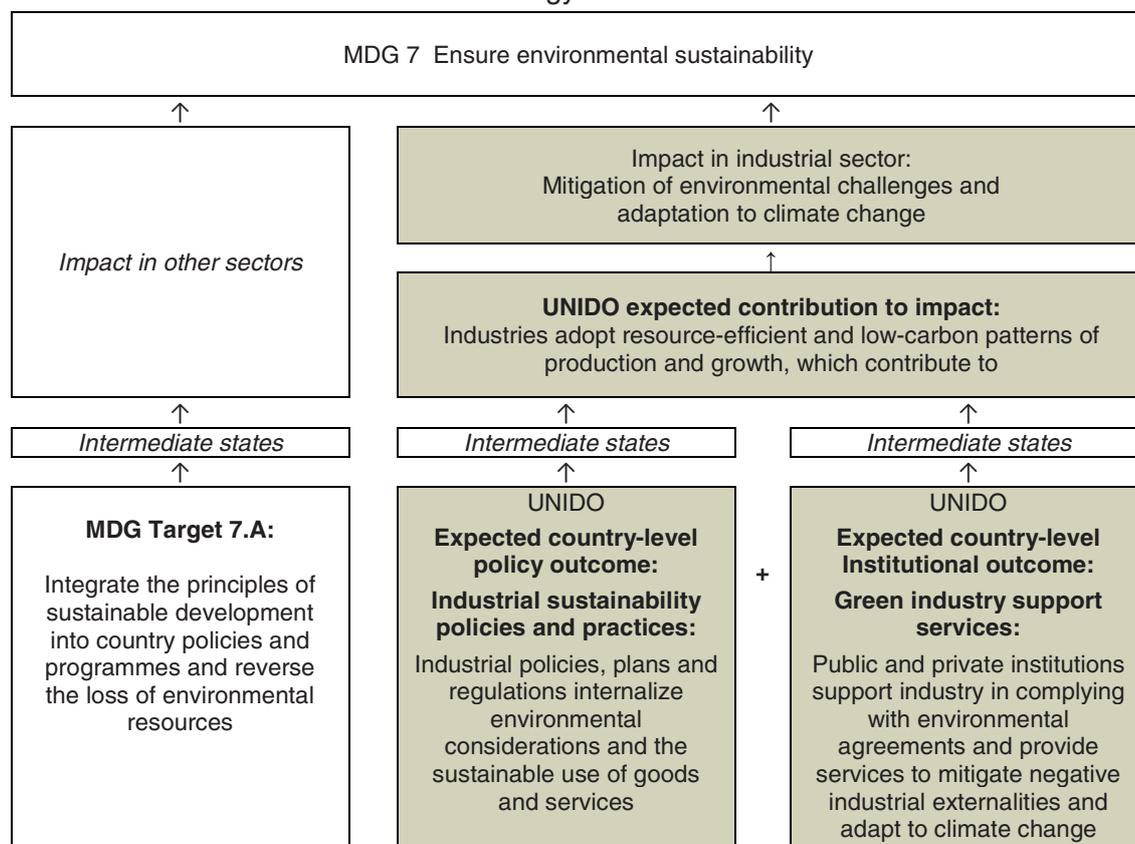
MDG 7. Targets	MDG 7. Indicators
<p>Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</p> <p>Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss</p>	<p>7.1 Proportion of land covered by forest</p> <p>7.2 Carbon dioxide (CO<sub>2</sub>) emissions, total, per capita and per \$1 GDP (PPP)</p> <p>7.3 Consumption of ozone-depleting substances (ODS)</p> <p>7.4 Proportion of fish stocks within safe biological limits</p> <p>7.5 Proportion of total water resources used</p> <p>7.6 Proportion of terrestrial and marine areas protected</p> <p>7.7 Proportion of species threatened with extinction</p>
<p>Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation</p>	<p>7.8 Proportion of population using an improved drinking water source</p> <p>7.9 Proportion of population using an improved sanitation facility</p>
<p>Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers</p>	<p>7.10 Proportion of urban population living in slums</p>

Unlike MDG 1, MDG 7 has no global indicator target values, but countries have developed their own targets and indicators.

According to the MTPF and the PB, UNIDO intends to contribute to MDG 7 through its programme C.3: Environment and Energy. A comparison between UNIDO's programme results matrix and MDG 7 targets and indicators is provided in Annex 4 and shows that UNIDO's programme is closely aligned with MDG 7, in particular, with MDG 7, Target A: 'Integrate principles of sustainable development into country policies and programmes'. See also an overview in Figure 3.16 below based on UNIDO's expected outcomes and expected contributions to impacts as stated in the PB 2012-2013.<sup>128</sup>

<sup>128</sup> PB 2012-2013, page 63.

Figure 3.16: Alignment of UNIDO programme C.3: 'Environment and Energy' with MDG 7



This section will examine the intervention logics leading to MDG contributions and whether actual or potential contributions exist, and, if so, how contributions have been assessed and measured. In doing so, we will also seek to validate the expected alignment with MDG 7. The section is organized according to UNIDO programme components with some adjustments for latest terminology and evaluation reports available.

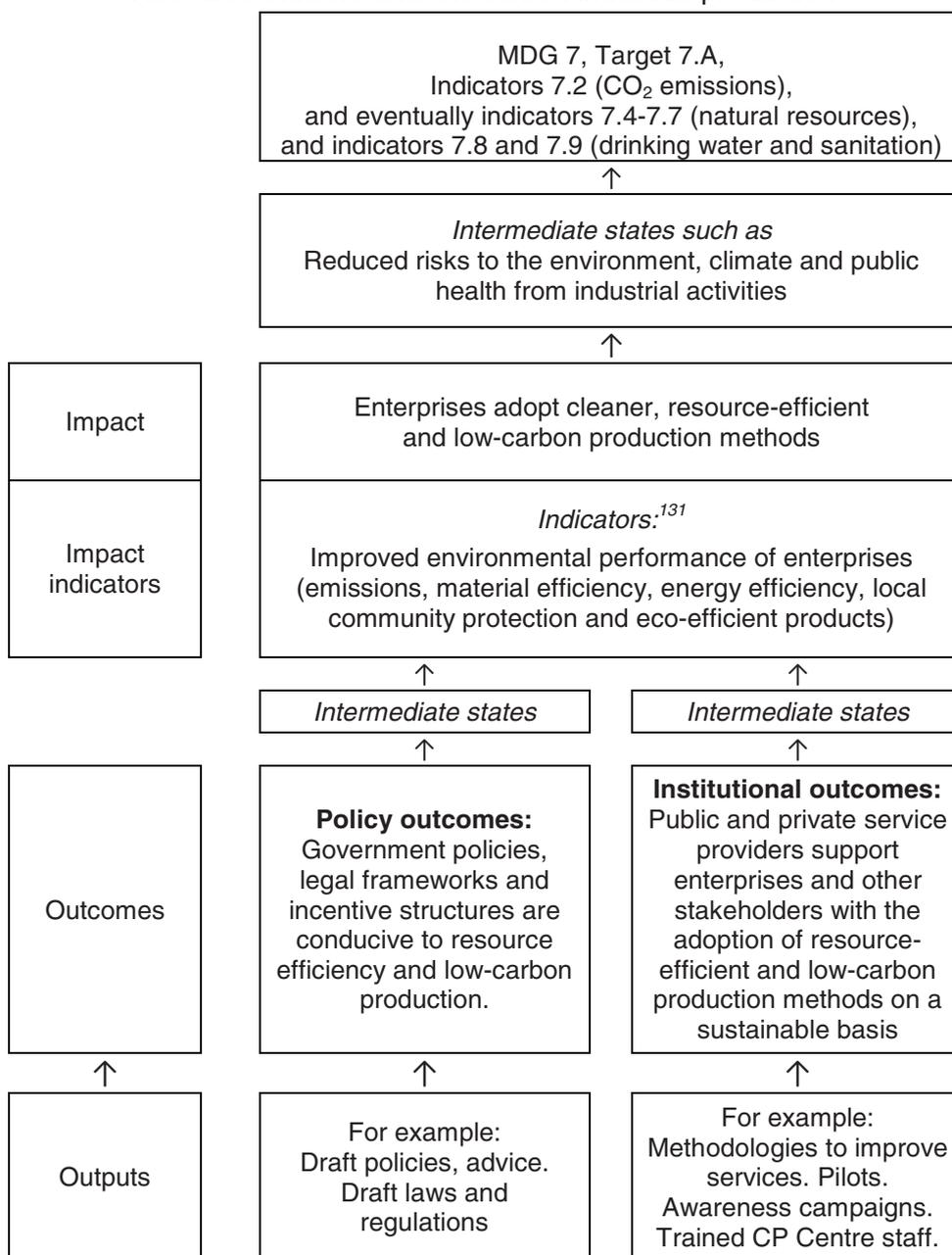
#### (a) Resource-efficient and cleaner production projects

Projects in the category of resource-efficiency and cleaner production (RECP) have a potential to contribute to MDG 7, particularly by supporting developing countries in integrating sustainable development into policies and programmes (Target 7.A) and in supporting their implementation, leading to reduced CO<sub>2</sub> emissions (Indicator 7.2) and reduced water use (Indicator 7.5).<sup>129</sup>

<sup>129</sup> As of the PB 2012-2013, this category of projects is listed under programme component 3.3.2 'Resource-efficient and low-carbon industrial production', but at the time of implementing the projects under evaluation, the term used was 'resource-efficient and cleaner production'. The two terms are used interchangeably in this report.

To appreciate how this would take place, a general intervention logic is depicted in Figure 3.17 based on the PB structure for programme component C.3.2.<sup>130</sup> This section will attempt to identify examples in the evaluation reports of actual or potential contributions to MDG 7 and review the associated intervention logics.

Figure 3.17: General intervention logic for Resource-efficient and low-carbon industrial production



<sup>130</sup> PB 2012-2013, page 65-66.

<sup>131</sup> The PB structure for programme component C.3.2 also includes the indicator: 'Improved economic performance of enterprises (investment, sales, productivity, innovation, export). As this section focuses narrowly on environmental impact, this indicator is not considered in this section.

The general intervention logic shows that RECP projects typically target enterprises through national institutions that they help develop, such as the National Cleaner Production Centres (NCPC) or other RECP service delivery mechanisms.

### **NCPCs**

The NCPC programme comprises a significant part of the projects implemented under programme component C.3.2. The related evaluation reports contain a number of examples of NCPC project effectiveness and results, some of which are presented in Box 3.14.

#### Box 3.14: Examples of NCPC projects

In Vietnam, an NCPC was established in 1998 with support from UNIDO and donors. The Centre delivers a wide range of cleaner production (CP) consulting services to mostly SMEs. In 2012, based on a sample survey, an evaluation found that 47 per cent of recipient companies applied all or most of the CP options recommend by the NCPC, e.g. good housekeeping and process control, resulting in reduced energy and material consumption and better compliance with environmental regulations. The NCPC also contributed to government policy initiatives, some of which were considered by the evaluation to be important for tackling the country's industrial pollution. Looking to the wider penetration of the CP concept across the Vietnamese industrial sector, it was assessed to be still very limited.<sup>132</sup>

In South Africa, a NCPC was formally established in 2003 with UNIDO's assistance, and assessed to have effectively achieved its outcomes. The NCPC has made strides in stimulating interest in cleaner production, organizing in-plant demonstrations with some confirmed uptake of recommendations, training cleaner production auditors, and providing policy advice.<sup>133</sup>

In Morocco, the creation of a NCPC was found to be 'an undeniable success', offering a gradually wider range of pertinent services to enterprises, from awareness building, training, environmental audits, to helping enterprises obtaining ISO 14001 certification.<sup>134</sup>

The examples show that, in principle, NCPC projects followed the intended general intervention logic. The Vietnam evaluation offers a results chain that more clearly demonstrates the role of the NCPC, as reproduced in Figure 3.18.<sup>135</sup>

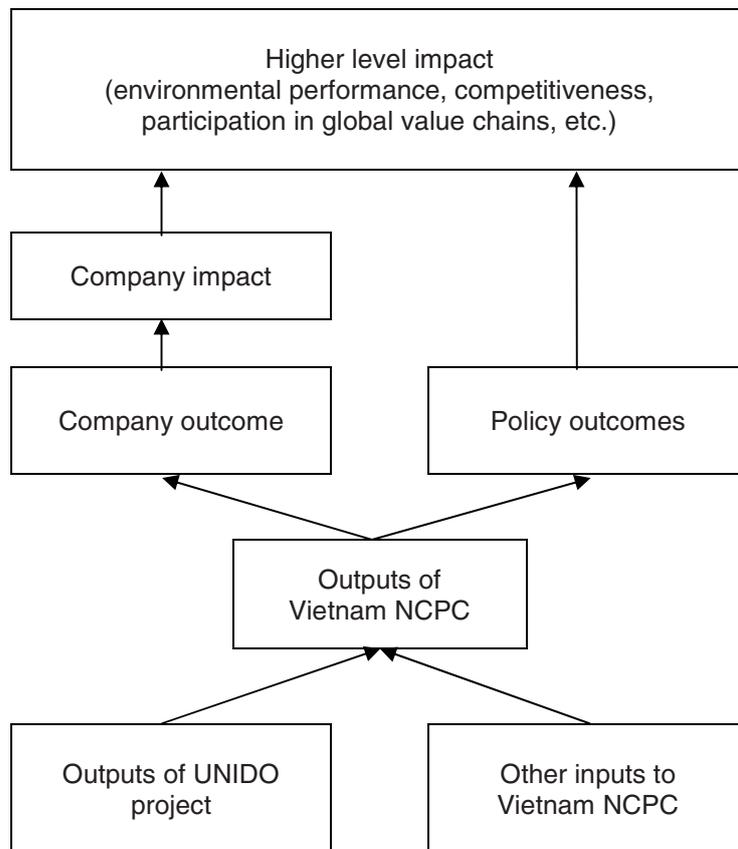
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<sup>132</sup> Independent impact evaluation of UNIDO support to the national cleaner production centre in Vietnam, pages 18, Figures 10, 13, 15, pages 26, 30, 31, respectively, and pages 32-33. Henceforth referred to as PE-VNCPC.

<sup>133</sup> CE South Africa, Annex A, Assessment of TC projects (NCPC).

<sup>134</sup> CE Morocco, pages 47-49.

Figure 3.18: Results chain of the UNIDO support to the Vietnam NCPC



A common trait of all NCPC interventions was that they target enterprises through awareness campaigns, training, environmental audits, and various CP assessments and/or demonstrations. The pathway from NCPC outputs to enterprise uptake and impact is not certain because not all client enterprises adopt CP options, and of those that do, some may not implement all recommendations. With respect to company impact, CP may lead to a range of benefits. Among others, the Vietnam NCPC evaluation estimated that NCPC client enterprises saved on average 65 per cent of their diesel oil consumption (or 10 tons each), 45 per cent of chemicals and 30 per cent of water consumption.<sup>135</sup> The array of benefits is wide, and the concerned UNIDO Branch, in collaboration with United Nations Environment Programme (UNEP), has developed a manual for enterprise level indicators.<sup>137</sup> Accordingly, reductions in CO<sub>2</sub> emissions or in water consumption are only two of the benefits and for enterprises and

<sup>135</sup> PE-VNCPC, Figure 2, page 6.

<sup>136</sup> PE-VNCPC, Figure 12, page 29.

<sup>137</sup> UNIDO and UNEP (2010), Enterprise-level indicators for resource productivity and pollution intensity; A primer for SMEs.

environmentalists, other benefits are as important and often more telling of the advancement towards ensuring environmental sustainability.

As significant as the resource savings may be at the enterprise level, a greater impact at the national level will be determined by the number and sizes of companies adopting CP technologies. In this regard, the evaluation assessed that the penetration of CP awareness in Vietnam was still limited and most client enterprises were SMEs rather than large enterprises.

The country evaluations provide little information on assumptions, risks or impact drivers for NCPD projects, but these are likely to exist at two stages along the intervention logic, namely: (i) from pilot enterprise outcome to pilot enterprise impact; and (ii) from pilot enterprise impact to uptake by other enterprises thereby generating additional impact at the national level. Cost savings at the enterprise level were mentioned by interviewees as the most important factor for replication along with government incentives and enforcement of rules and regulations.

With respect to the pathway from NCPD contributions to policy outcome and further on to higher level impact, the Vietnam evaluation used an expert panel to assess barriers as to why policies had not led to the expected results. The most important barriers are listed in Table 3.5 in order of importance as assigned by the panel with respect to Vietnam, but most of them could be relevant in other countries as well.<sup>138</sup>

Table 3.5: Barriers to why CP policies did not yet lead to environmental impact

- |   |
|---|
| <ul style="list-style-type: none"><li>▪ SMEs lack awareness</li><li>▪ Environment aspects are not sufficiently considered for new investment</li><li>▪ Insufficient awareness of government officials</li><li>▪ Lack of financial incentives by the government for companies to apply CP</li><li>▪ Insufficient outreach of administration to provinces</li><li>▪ SMEs lack the necessary know-how</li><li>▪ Lobbying of powerful interest groups</li><li>▪ Lack of consumer awareness</li><li>▪ Insufficient environmental inspection and enforcement</li><li>▪ Energy prices too low</li><li>▪ Policies/emission standard not aligned</li><li>▪ Limited access to credit for financing technology upgrading</li></ul> |
|---|

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<sup>138</sup> PE VNCPD, Figure 16, page 32.

In conclusion, the review showed that the establishment of NCPCs to address national environmental issues is complex in nature and has a long lead time. The exact pathway and the actual or potential increase or decrease of national MDG 7 indicators is not certain. However, the NCPCs play an important catalytic role.

### ***Energy efficiency leading to reduction in CO<sub>2</sub> emissions***

Energy efficient projects generally aim to reduce CO<sub>2</sub> emissions and thereby contribute to national targets. The evaluations offered a few such projects as featured in Box 3.15.

#### Box 3.15: Energy efficiency in China, India, and Dominica

In China, between 1998 and 2007, UNIDO carried out two large-scale projects entitled: 'Energy conservation and greenhouse gas emissions reduction in Chinese townships and village enterprises' to help reduce CO<sub>2</sub> emissions in the brick, cement, metal casting and coking sectors. The project successfully demonstrated energy efficient technologies in pilot enterprises leading to 118 replications and annual reductions in CO<sub>2</sub> emissions by more than 1.3 million tonnes. These results were made possible thanks to national commitment and additional co-financing of about \$ 150 million.<sup>139</sup>

In India, a series of projects initiated in 1998, demonstrated the commercial viability of 'coal bed methane recovery and its utilization in two coalfields', with a potential to reduce greenhouse gases with 340,000 tonnes of CO<sub>2</sub>. The projects also had positive safety and social impacts through provision of uninterrupted power supply to local workers and residents.<sup>140</sup>

In Dominica, as part of the Global Sustainable Energy Initiative for the Caribbean countries, a study for the Dominica Electricity Services Limited lead to a reduction in electricity losses from 18-20 per cent to 10 per cent and is on track to reduce it further to 4.5 per cent. In addition to reducing technical losses, the study triggered a switch to more accurate electronic metres that would reduce non-technical losses from inaccurate readings.<sup>141</sup>

The reductions in CO<sub>2</sub> emissions estimated for China and India are clear contributions to the countries' MDG 7 targets, and the estimates make it possible to quantify the contribution. The project **indicators** are fully compatible with MDG 7, Indicator 7.2 - CO<sub>2</sub> emissions.

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<sup>139</sup> CE China, page 26, Box 1 Case study. And UNDG (2010), MDG Good practices, Chapter 4, MDG 7, pages 31-32.

<sup>140</sup> CE-India, pages 52 and 71.

<sup>141</sup> Independent Terminal Evaluation, UNIDO Global Sustainable Energy Islands Initiative (GSEII), Caribbean Region, pages 20, 42, and 43. Henceforth referred to as PE GSEII.

The Dominica example shows the range in size of projects and the relative importance of energy efficiency in small economies. It also illustrates that not all project evaluations could access data on reductions in CO<sub>2</sub> emissions.

For pilot demonstration projects aimed at reducing CO<sub>2</sub> emissions, the pathway from project outputs to pilot enterprise impact may be relatively short, but the challenge is to multiply the effects to generate national level impact. The above example from China is a case in point. In this case, the following ‘catalysts’ were mentioned as having helped the many successful replications: (i) appropriate technologies, (ii) favourable policy environment and strong government coordination, (iii) market demand (price of electricity and coal), and (iv) financial leverage to finance additional investments.<sup>142</sup>

In large countries such as China, the gains in projects like the example provided are important. However, the magnitude of CO<sub>2</sub> emissions is daunting. Another project, launched in 2006 by the International Finance Corporation, ‘China Utility-based Energy Efficiency Finance Programme’, generated by 2009 98 energy efficient investments, leading to an estimated 14 million tonne reduction in CO<sub>2</sub> emissions.<sup>143</sup> Still, in the Chinese national context, the government reported in its 2010 MDG progress report that “China is still struggling to reduce its energy use per unit of GDP and slowing carbon emissions because of its reliance on coal as an energy source.”<sup>144</sup>

The measurement of CO<sub>2</sub> emissions at the national level is also challenging. In this regard, it is worthwhile to mention a project supported by UNIDO in India entitled ‘Voluntary initiative to promote greenhouse gas accounting and low-carbon production in sectors in Indian industry’. It is hoped that the cement and chemical industries would participate, providing authorities with basic data for estimating CO<sub>2</sub> emissions.<sup>145</sup>

### ***Water savings and reduced pollution of water bodies***

Water use for industrial purposes accounts for a significant portion of total water use. Savings in industrial water usage, other usages being equal, therefore, would lead to a lower proportion of total water resources used, which is measured by MDG 7, Indicator 7.5. Furthermore, savings in water for industrial use would make more water available for human consumption and could

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<sup>142</sup> CE-China, see note 131 above.

<sup>143</sup> World Bank, Independent Evaluation Group, (2011), ‘Lessons from evaluation: Private sector development in a changing world’, page 5.’ (A short brochure). The project provides investment guarantees and technical assistance in energy efficient investments.

<sup>144</sup> Government of China, MDG progress report, 2010, page 45.

<sup>145</sup> CE India, page 54.

indirectly contribute to Target 7.C: Halve, by 2015, the proportion of population without sustainable access to safe drinking water and sanitation.

Savings in water use is often one of the benefits from NCPC activities or from projects aimed at not only reducing the use of water but also reducing the discharge of polluted water into water bodies, including transboundary waters. One such project, namely a joint UNIDO-Global Environment Fund project aimed to reduce transboundary pollution in the Danube River Basin, was subject to a final evaluation. It is briefly described in Box 3.16.

**Box 3.16: Reducing waste water discharge into the Danube River Basin**

Five countries along the river Danube piloted the transfer of environmentally sound technologies (TEST) in 17 pilot enterprises and built up capacities in applying the method with the aim to reduce waste water discharges into the Danube. A terminal evaluation found a total reduction in water use across the participating enterprises of about 2,675 million m<sup>3</sup>, equivalent in some cases to 65 per cent savings compared with pre-project consumption. Also the pollution load of waste water was significantly reduced, and other benefits included reductions in the use of raw materials, chemicals, as well as energy, the latter leading to reduced CO<sub>2</sub> emissions. With respect to some enterprises, the post-project discharge pollution loads were below the immediate background measurements a few metres downstream.<sup>146</sup>

The example showed that savings in water use can be significant. While the project indicator is fully compatible with the MDG Indicator 7.5, the contribution to the MDG 7.5 would require national aggregation of industrial water savings resulting from NCPC activities as well as targeted projects. The example also confirmed that water use was just one among many objectives, as a reduction in discharge of pollutants was the project's main goal. The evaluation report noted a weak monitoring system, and that replications had been less than foreseen due to lack of funding or other incentives. An important impact driver had been the need for the participating countries to comply with EU standards.

The report did not refer to any measurements demonstrating improved water quality along the river basin, which in turn could lead to improvement in fish stocks (MDG 7 Indicator 7.4). Similarly, the evaluation did not refer to more water being available for other uses, including increasing people's accessibility to clean drinking water (MDG 7 Indicator 7.8). While clean water sources is a prerequisite for this goal, the distribution system is of paramount importance, and the

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<sup>146</sup> Global Environment Fund, (2005), Final Evaluation, Transfer of environmentally sound technologies to reduce transboundary pollution in the Danube River Basin, pages 34-43.

contribution from UNIDO projects would lead through a complex pathway requiring a multitude of assumptions and supportive measures. Against this background, it can be concluded that the contribution of UNIDO projects to MDG Indicators 7.4 (fish stocks) and 7.8 (safe drinking water) is implicit, not part of the project's strategy and not readily verifiable.

Finally, RECP projects might lead to positive impact on the economic dimension of MDG 1, as referred to in Section 3.1.1.h above and to the human dimension of MDG 1 through alleviating workers' exposure to harmful substances.

## **(b) Renewable energy projects**

The use of clean and renewable energy has the potential to contribute to MDG 7 by integrating this concept into country policies and plans, and by supporting countries in implementing such policies and plans, which would lead to a reduction in CO<sub>2</sub> emissions. It is well recognized that the MDGs contain no goal or target for energy access, although it is a fundamental prerequisite for development and poverty reduction. For the purpose of this review, this section will briefly discuss SHP projects, the Global Sustainable Energy Island Initiative, and hydrogen applications based on programme component C.3.3, as defined in the PB 2012-2013. The general intervention logic for this programme component is presented in Figure 3.19.<sup>147</sup>

### ***Small hydro power***

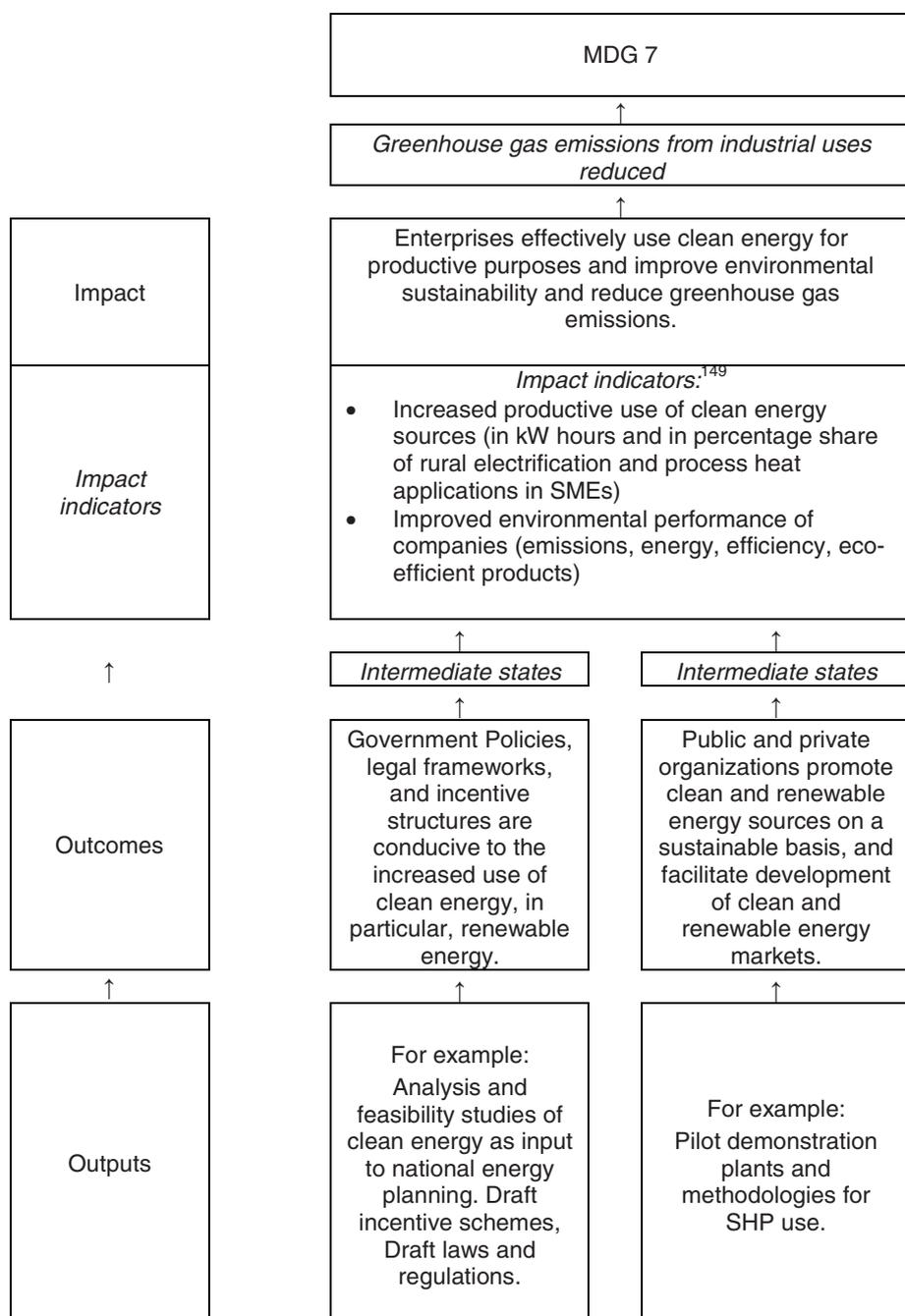
The thematic review of SHP projects noted that off-grid electricity for isolated villages and significant carbon reduction are two different objectives that often cannot be pursued by similar means.<sup>148</sup> SHP projects in general follow the pathway of Figure 3.19, but in practice, also follow more complex systems as illustrated in Figure 3.13 above in Section 3.1 (f). The thematic review also found that the contribution of UNIDO SHP projects to reductions in CO<sub>2</sub> emissions is uncertain. The benefits of SHP projects in remote communities were discussed in Section 3.1. (f) and are likely to be a main justification for SHP projects.

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<sup>147</sup> PB 2012-2013, page 67.

<sup>148</sup> TR SHP, page 13.

Figure 3.19: General intervention logic for clean and renewable energy access for productive use



<sup>149</sup> The PB structure as includes the indicator “Economic benefits from increased use of clean energies (new business, jobs, incomes) which was used for reviewing the component’s potential contribution to MDG 1.

### ***Global sustainable energy islands initiative***

The Global Sustainable Energy Island Initiative included a number of activities targeted at Caribbean countries and implemented between 2004 and 2010. The initiative was evaluated in 2010.<sup>150</sup> Some of the activities are described in Box 3.17.

#### **Box 3.17: Sustainable energy initiatives in the Caribbean**

As part of the Global Sustainable Energy Initiative, UNIDO provided a range of energy-related outputs to Caribbean countries. A end-of-project evaluation in 2010 found that a geothermal and wind resources law developed for St. Kitts and Nevis was highly effective, resulting in a 2.2 megawatt wind farm successfully supplying electricity to the grid on Nevis.

Similar and relevant policy and legal advice was given to the government of St Lucia; however, it was not certain whether or not the government would be able to implement the recommendations. Sustainable Energy Plans developed for several countries were not seen by the evaluation to have been effective in general, largely due to serious questions about their relevance in leading to practical and implemented sustainable energy changes.<sup>151</sup>

From the assessment, it can be concluded that the Initiative helped develop plans, policies, and laws that would contribute to MDG 7. A: Integrate the principles of sustainable development into country policies and programmes. However, only in the case of Nevis was the new law applied; in other cases, the evaluation report found that one government was unable to free up land for renewable energy resource use from existing owners or concession holders; in another case, utility companies were unwilling to purchase the renewable energy. In other cases, the regulatory environment prevented further development.

On the actual or potential impact on CO<sub>2</sub> emissions, the reports did not have access to such data from the Nevis wind farm, thus the exact contribution to MDG 7 Indicator 7.2 CO<sub>2</sub> emissions could not be quantified. In addition, the evaluation did not refer to any indirect employment or income gains, although an improved electricity supply in Nevis may now help sustain tourism on the island and hence secure employment. The initiatives in the Caribbean also included a mix of other activities that did not lead to tangible renewable energy actions in the

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<sup>150</sup> UNIDO, (2011), Independent Terminal Evaluation, UNIDO Global Sustainable Energy Islands Initiative (GSEII) Caribbean Region, Henceforth referred to as PE GSEII.

<sup>151</sup> PE-GSEII, pages 20, 42, and 43. The Initiative also included the study on reduction of electricity losses for the Dominica Electricity Services Limited as described in Box 3.15 above.

concerned countries. The evaluation recommended a greater focus on the underlying intervention logic and assumptions, in particular with a view to ensure impact of demonstration projects.<sup>152</sup>

The sustainable energy initiatives in the Caribbean region appeared to serve several intertwined objectives, namely, decreasing dependency on imported oil; realizing employment and income benefits of reliable and efficient power supply to remote islands; and ensuring a sustainable environment.

### ***Hydrogen application projects***

The International Centre for Hydrogen Energy Technologies in Turkey has since 2007 pursued tangible hydrogen application projects in collaboration with partners in various countries as well as various awareness raising and training activities. An example project is described in Box 3.18.

#### Box 3.18: Hydrogen fuelled transportation to alleviate urban pollution

In collaboration with partners in India, the International Centre for Hydrogen Energy Technologies in Turkey is developing and testing hydrogen fuelled 3-wheel vehicles. By using the same fuel tank as 3-wheelers fuelled by compressed natural gas, hydrogen fuelling is expected to eliminate the nitrogen oxide emissions produced from natural gas at a competitive cost. The hydrogen powered 3-wheeler would target transportation applications initially in India where it was found to be an excellent fit with the Indian National Hydrogen Energy Road Map. The technology has a promising replication potential in countries that currently use Indian 3 wheelers and experience severe urban pollution combined with good potential to produce hydrogen from electrolysis, e.g. Kathmandu, Nepal.<sup>153</sup>

The evaluation did not assess this particular project alone and numerous additional stages would be needed before widespread use and health and environmental impacts were achieved. In the evaluation of UNIDO's International Technology Centres, the effectiveness of this Centre's activities was assessed as follows: 'Some very good technology demonstrations, but generally weak results focus on 'real-world' application of hydrogen applications.'<sup>154</sup> The same evaluation assessed impact as follows: 'Impact orientation of Centre's work is low; development effects not reported on.'<sup>155</sup>

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<sup>152</sup> PE-GSEII, page 46.

<sup>153</sup> Independent in-depth mid-term review, UNIDO International Centre for Hydrogen Technologies, pages viii-v.

<sup>154</sup> Thematic evaluation of UNIDO's international technology centers, 2010, table 8, pages 49 and 50.

<sup>155</sup> Ibid same table, page 50.

Such research, application, and development work may be important for future development and a potential contribution may materialize in years to come, but at this stage, no actual or estimated contribution to reduce CO<sub>2</sub> emissions could be reported.

### **(c) Montreal Protocol projects**

Direct contributions to MDG 7 come from Montreal Protocol (MP) projects, namely to MDG 7, Target 7.A, Indicator 7.3 Consumption of ozone-depleting substances (ODS). Thanks to UNIDO projects, by the end of 2011, more than 70,300 ozone-depleting potential (ODP) tonnes were eliminated, representing 16 per cent of total phase-out achieved in developing countries.<sup>156</sup> A thematic review of MP projects conducted in 2010 also confirmed that UNIDO's support for the phase-out of production and consumption of ODS in developing countries had played a major role in achieving the MP targets.<sup>157</sup> The review partly ascribed this success to the simplicity of the MP approach, namely technology substitution with focus on one clearly defined objective – ODS phase-out.<sup>158</sup> The review presented an overall intervention logic for three types of MP projects: (i) formation of a national ozone unit, (ii) substitution of production and consumption technology, and (iii) establishment of an ODS recovery scheme. The theory of change for MP projects is available in Annex 12.<sup>159</sup> As the bulk of MP projects are concerned with technology *substitution*, a simplified intervention logic for this type of project is extracted from the overall intervention logic and depicted in Figure 3.20, including impact drivers and assumptions as identified by the thematic review.

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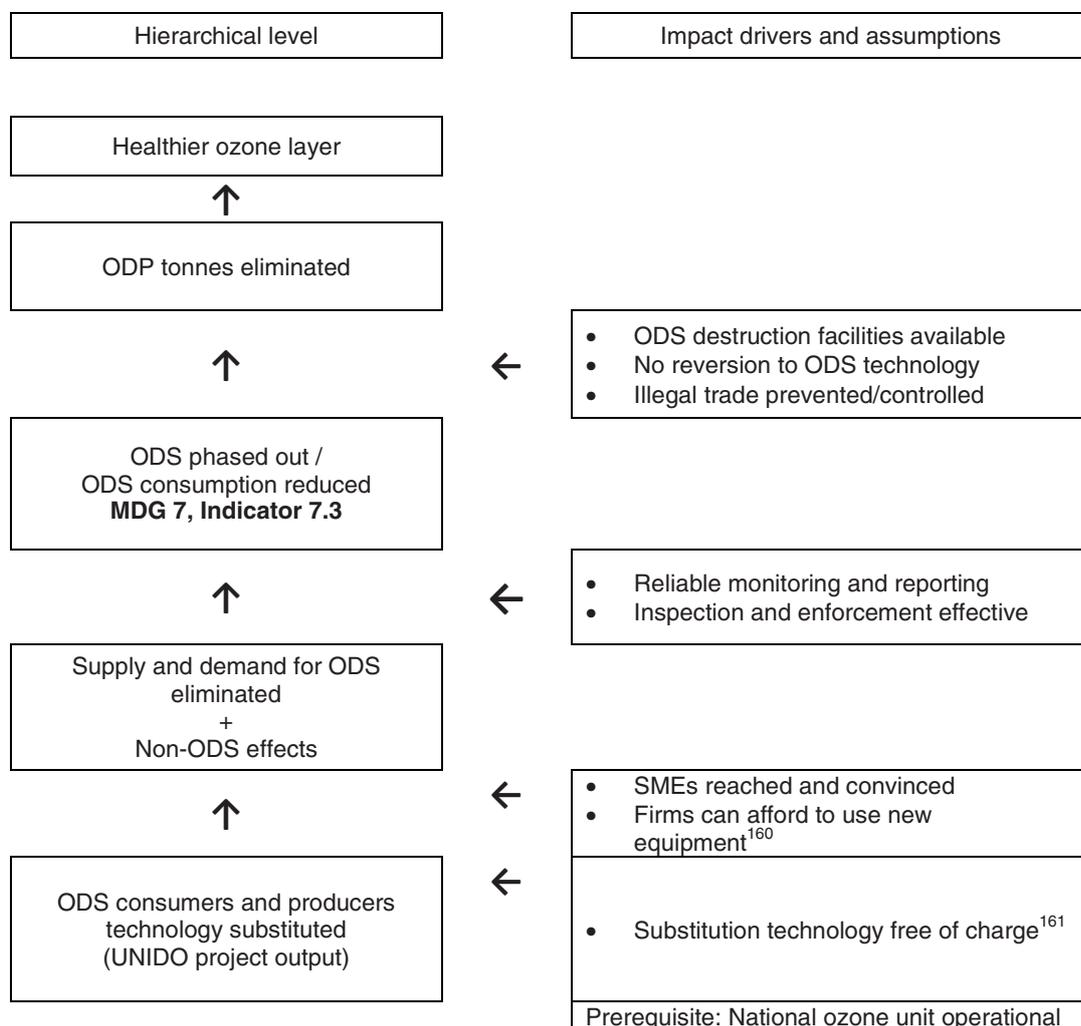
<sup>156</sup> Data provided by MP Branch.

<sup>157</sup> UNIDO, 2010, Independent review of UNIDO Montreal Projects, page 'ix' (henceforth referred to as TR MP).

<sup>158</sup> Ibid page 'ix'.

<sup>159</sup> Ibid Figure 4-1 – Theory of Change, UNIDO MP projects, page 18.

Figure 3.20: Simplified intervention logic for MP technology substitution projects



All projects reviewed for the thematic review were effective in substituting the technology, although in a few cases the recipient company faced difficulty in applying the new technology.<sup>162</sup> As can be seen in Figure 3.20, the causal chain is relatively short, with just a few intermediate states between project output and MDG impact. For the technology substitution to take place, the national legislation, rules, and regulations and the national ozone unit should be in place (acting as prerequisites). The MP review did not make any observations about whether the fact that the new technology is free-of-charge to the recipient

<sup>160</sup> Ibid page 20, TR indicated that this assumption should be added to the generic theory of change.

<sup>161</sup> Added by this reviewer.

<sup>162</sup> Ibid page 20.

company, had helped drive implementation, but that may have been an added incentive. The assumptions are within the control of the governments. With time, the illegal trade and reversion to ODS technology will cease, as ODS and ODS-consuming equipment will no longer be produced. The size of the contribution to Indicator 7.3 (consumption of ODS) can be estimated fairly accurately by using a scientific formula, and the overall magnitude of ODP can be estimated depending on the number and technical characteristics of enterprises that have had their equipment substituted. The respective national ozone offices monitor the total ODP tonnes (or ODS phase-out) at the national level and report regularly to the Multilateral Fund for the Implementation of the MP. At the global level, this is reported in the UN MDG annual reports.<sup>163</sup> The mandatory compliance with the international convention clearly acts as an important impact driver.

The MP review observed that, occasionally, positive non-ODS effects were achieved, for example, on productivity gains or workers' safety; but such benefits had not been directly pursued in MP projects because funding was only granted to ODS phase-out activities according to strict MP rules.<sup>164</sup> However, the review still considered this as a missed opportunity, and recommended that UNIDO use the leverage of MP projects to promote sustainable industrial development in a broader way.<sup>165</sup> These findings have been echoed in country evaluations, as can be seen from the two examples below on China (Box 3.19) and Morocco (Box 3.20), respectively. An additional positive non-ODS effect of importance for the MDGs was that the updated technology, at times, leads to reduction in energy use and the associated reduction in CO<sub>2</sub> emissions.

#### Box 3.19: ODS phase-out in China

In China, UNIDO managed a large portfolio of MP projects, following a comprehensive ODS phase-out strategy that focused on five areas: policy; training and awareness; technology transfer; adaptation in SMEs; and combining ODS phase-out and sustainable development. This was made possible by extensive engagement of the Chinese authorities. The country evaluation concluded that the MP projects were relevant and effective in phasing out ODS.<sup>166</sup>

<sup>163</sup> See, for example, UN, MDG Report 2011, page 50.

<sup>164</sup> TR MP, page 15, and confirmed by UNIDO MP staff.

<sup>165</sup> Ibid page 28.

<sup>166</sup> UNIDO, independent UNIDO Country Evaluation, People's Republic of China, pages 32 and 38 (henceforth referred to as CE China).

### Box 3.20: ODS phase-out in Morocco

In Morocco, the complete phase-out of ODS from chlorofluorocarbon (CFC) was achieved in 2008, two years ahead of schedule. Now plans are advancing for achieving full phase-out of hydrofluorocarbon (HCFC) by 2040.<sup>167</sup> Also in Morocco, a 10-year programme spanning successive projects had successfully phased out ODS stemming from methyl-bromide, a potent green-house gas and strong pesticide applied as a fumigant in soil disinfection in intensively cultivated crops, notably tomatoes, which accounted for about half of the country's consumption of methyl-bromide. These achievements are reported in the Morocco MDG progress report, indicating a decrease in ODS consumption from 564 ODS tonnes in 2000 to 435 tonnes in 2006.<sup>168</sup> This reduction can largely be ascribed to UNIDO projects.<sup>169</sup>

It can be concluded that MP projects have made a measurable contribution to MDG 7. Given the direct link between MP project outcome and Indicator 7.3 (consumption of ODS), it was possible to calculate the national and global relative proportion of ODS phase-out that could be attributed to UNIDO MP projects.

#### **d) Persistent organic pollutant (POPs) projects**

Projects in the area of persistent organic pollutants (POPs) aim to eliminate a class of chemicals that is resistant to environmental degradation and accumulates in nature with severe health consequences for animals and humans. The Stockholm Convention aims to protect humans and the environment from POPs, and POPs projects therefore may contribute to the human health dimension of MDG 1, in addition to MDG 7. POPs projects have a global and local impact by helping signatories to comply with the Stockholm Convention and by improving local public health, respectively.

The country evaluations offered a few assessments of POPs projects: some projects had prepared the National Implementation Plan (NIP) (Rwanda);<sup>170</sup> other projects applied an integrated approach in a pilot sector and helped strengthening the legal framework and implementing changes at the same time (for example, in Morocco, edible oils<sup>171</sup> and in India, medical waste).<sup>172</sup> In China,

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<sup>167</sup> CE Morocco, page 65.

<sup>168</sup> Royaume du Maroc (2010), Objectifs du millénaire pour le développement. Rapport National 2009, page 53.

<sup>169</sup> The non-ODS effects of this project are described above in Section 3.1.1 (h), the human health dimension of MDG 1.

<sup>170</sup> CE Rwanda, page 35.

<sup>171</sup> CE Morocco, page 69.

<sup>172</sup> CE India, page 49. Also, the India project would be subject to a final project evaluation.

seven POPs projects were under implementation, and assessed to make a significant contribution towards improving the capacities of China in meeting its commitments vis-à-vis the Stockholm Convention.<sup>173</sup>

The thematic evaluation of POPs developed two consecutive theories of change, namely, one for the NIPs, followed by one for post-NIP implementation.<sup>174</sup> The POPs projects clearly contribute to MDG 7, Target 7.A 'Integrate the principles of sustainable development into country policies and programmes', by assisting country authorities in developing an NIP.

With respect to the NIP implementation, the elimination of POPs could be considered an overall effort towards ensuring environmental sustainability, but there is no specific MDG indicator that reflects its global or local impact. (This might be owing to the Stockholm convention being adopted in 2001 and only going into effect in 2004, well after the definition of the MDG Indicators).<sup>175</sup> There might be incidences of eliminating localized, high concentrations of POPs, which indirectly could support MDG 4 (Reduce child mortality) and/or MDG 5 (maternal health) or otherwise mitigate the human health dimensions of poverty. The thematic POPs evaluation mentioned that the links to these two MDGs are often made in POPs projects, and in some cases, awareness raising is among the outputs. However, the thematic evaluation also noted that in spite of relevant intentions, none of the projects assessed had made an explicit link to MDG 4 or MDG 5 in project designs or in reporting on implementation.<sup>176</sup> The thematic evaluation concluded that the relevance of the POPs portfolio to the MDGs was largely implicit and lacked acknowledgement and specificity in project design and implementation.<sup>177</sup>

#### **(e) Contributions to MDG 7 from other projects**

Some spillover effects from other project categories were noted. For example, a SMTQ project in Sri Lanka upgraded the water-testing capacity of a chemical laboratory so that it could test waste water effluent from the apparel industry.<sup>178</sup> Systematic focus on water testing and tracking of results might indirectly contribute to MDG Target 7. C, Indicator 7.8: Proportion of population using an improved drinking water source. In other cases, projects implemented under

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<sup>173</sup> CE China, page 31.

<sup>174</sup> UNIDO, Thematic Evaluation of UNIDO work in the area of POPs, draft report, dated December 2011, Figures 2 and 3, pages 13 and 14. Henceforth referred to as TE-POPs.

<sup>175</sup> TE-POPs, page 3.

<sup>176</sup> Ibid page 42-43, especially paragraph 113.

<sup>177</sup> Ibid page 42, paragraph 114.

<sup>178</sup> IE Sri Lanka SMTQ, page 28. This is the chemical laboratory at the Industrial Technology Institute.

CND, such as the 'Sustainable housing project in El Salvador', could contribute to Target MDG 7.D, Indicator 7.10: Proportion of urban population living in slums. Furthermore, tannery effluent water treatment projects may contribute to MDG 7, Indicator 7.5 (Water use); however, no such project was covered in the evaluation reports reviewed.

#### **(f) Conclusion on MDG 7**

The findings confirm the close alignment of UNIDO's environment and energy programme to MDG 7. The intervention logics vary across programme components: MP technology substitution projects have a relatively short intervention logic working directly at the enterprise level and measuring impact by just one, well-defined and quantifiable indicator, making it feasible to aggregate results at the national level. NCP and resource efficiency projects, on the contrary, have long intervention logics, building up institutions and influencing enterprises through awareness building, training, and demonstration effects, while measuring impact at the enterprise level on an array of indicators. Aggregate impact at the national level is difficult to measure and has wide attribution gaps. The hydrogen technology application represents yet a different, complex pathway with a long lead time until ultimate environmental impact materializes.

There is clear evidence of contributions to MDG Target 7. A (Integrate environmental sustainability into country policies and programme), such as putting in place SEP, NIPs, ODS phase-out policies and a wide range of environmental policies for cleaner production in many countries.

Many UNIDO projects support governments in developing or implementing industrial environmental policies, and in reaching MDG 7 indicators. This is the case for **Indicator 7.2 (CO<sub>2</sub> emissions)**. In most cases, the indicator can be measured and quantified, at least at the enterprise level. With respect to MDG **Indicator 7.3 (Consumption of ODS)**, again, UNIDO project impact is measurable and the indicator is fully compatible with the MDG indicator. For example, by the end of 2011, UNIDO projects had resulted in the phase-out of more than 70,300 tonnes ODS, representing 16 per cent of all developing country ODS phase. With respect to **Indicator 7.5 (Water used)**, this indicator is one among several resource-efficient indicators applied in UNIDO RECP projects. The indicator is measurable and quantifiable, but the collection of the data at the enterprise level is not obvious.

With respect to other MDG 7 indicators, evidence is scarce. The evaluation reports did not offer examples of how the above results had translated

themselves into cleaner water bodies leading to, for example, fish stocks within safe biological limits (MDG 7 Indicator 7.4), or a proportion of the population with access to safe drinking water (MDG 7 Indicator 8). Although relevant, the project contributions are implicit without specific reference to project strategies, design, indicators or reporting, and it would require additional research and monitoring to establish such links.

Impact drivers were found to be diverse across programme components, ranging from compliance with international conventions and protocols to awareness in government and enterprises alike (especially with respect to CP and renewable energy). Impact drivers were closely linked to the replication of pilot demonstrations. The most obvious factor identified was cost savings associated with the introduction of environmentally sound procedures or technologies. Also important for scaling up successful pilots were government policies and regulations.

An overview of MDG 7 findings is provided in Table 3.6 below.

Table 3.6: MDG 7 – Summary of findings

<b>MDG 7: Ensure environmental sustainability</b>	
<b>MDG 7 Targets</b>	<b>UNIDO project contributions</b>
<b>Target 7.A:</b> Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources;	Policy outcomes of environment and energy projects: <ul style="list-style-type: none"> <li>▪ NCPC / RECP projects - variety of policies</li> <li>▪ Renewable energy projects - SEPs</li> <li>▪ MP projects - ODS legislation</li> <li>▪ POP projects – NIPs</li> </ul>
<b>MDG Indicators</b>	<b>UNIDO project contributions and indicators</b>
Indicator 7.2: CO <sub>2</sub> emissions	Mainly RECP/NCPC projects <ul style="list-style-type: none"> <li>▪ Indicators compatible and measurable</li> <li>▪ Direct impact at pilot enterprise level</li> <li>▪ M&amp;E systems challenging</li> <li>▪ Scaling up pilots and replications are challenging</li> </ul>
Indicator 7.3: ODS consumption	MP technology substitution projects <ul style="list-style-type: none"> <li>▪ Indicator compatible</li> <li>▪ Direct impact at enterprise level</li> <li>▪ Impact is aggregated at national level to measure degree of national achievement of this MDG target</li> </ul>
Indicator 7.5: Proportion of total water resources used.	RECP /NCPC projects: <ul style="list-style-type: none"> <li>▪ Indicators compatible and measurable</li> <li>▪ Direct impact at pilot enterprise level</li> <li>▪ M&amp;E systems challenging</li> <li>▪ Scaling up pilots and replications are challenging</li> </ul>
<b>MDG Target 7.B: Reduce biodiversity loss</b>	No apparent contribution from UNIDO projects
MDG 7.B Indicators: 7.1: Land covered by forest, 7.4: Fish stocks, 7.6: Terrestrial, marine areas protected, 7.7: Threaten species	There may be implicit long-term contributions not verifiable through existing projects
<b>MDG Target 7.C: Halve proportion of people without sustainable access to safe drinking water and basic sanitation</b>	
Indicator 7.8: Proportion of population using an improved drinking water source	Some RECP projects may contribute implicitly Some contribution from spillover effect of SMTQ projects through testing of water quality
Indicator 7.9: Proportion of population using an improved sanitation facility	No apparent contribution from UNIDO-supported projects

MDG 7 Targets	UNIDO project contributions
<b>MDG 7.D. Significant improvement in the lives of at least 100 million slum dwellers</b>	Possible contribution from some ad-hoc projects implemented under the MDG-Fund
Indicator 7.10: Proportion of people living in slums	As above

Table 3.6: MDG 7 – Summary of findings (continued)

### 3.4 Project contribution to MDG 8: Develop a global partnership for development

MDG 8 is mainly dedicated to the actions and commitments of developed countries. The below table summarizes the targets and indicators; the complete text is included in Annex 1. For a comprehensive update on the status of MDG 8, see the MDG Gap Task Force Reports.<sup>179</sup>

The national targets and indicators for MDG 8 vary: some mirror all targets whereas others focus on just Target 8.F (Benefits of communication technology). This section will review and seek to match findings from evaluation reports and other sources with each target and its indicators.

MDG 8 Targets in summary form	MDG 8 Main groups of indicators
Target 8.A: International trading and financial system Target 8.B: Needs of LDCs Target 8.C: Needs of landlocked countries and small island states Target 8.D: Debt problems of developing countries	8.1–8.5: Indicators on ODA 8.6: Proportion of total developed countries' imports from developing countries and LDCs, admitted free of duty 8.7- 8.8: Other indicators on market access 8.9: Proportion of ODA provided to help build trade capacity 8.10-8.12: Indicators on debt sustainability
Target 8.E: In cooperation with pharmaceutical companies, provide affordable essential drugs in developing countries	8.13: Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14–8.16: Telephones, cellular subscribers, and Internet users per 100 population

<sup>179</sup> UN, MDG Gap Task Force Report 2010: MDG 8. The global partnership for development at a critical juncture; and MDG Gap Task Force Report 2011: MDG 8. Time to deliver.

**(a) Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system**

The MTPF, PB, and some IDB documents on MDG contributions indicate – mostly without specifics – that the trade capacity-building programme contributes to MDG 8. Some evaluation reports also noted policy outcomes of SMTQ projects that related to trade. However, these outcomes related to national policies that would enable the country to enter foreign markets rather than addressing international rules. Similarly, some CND projects stated ‘increased export’ as the development objective, but again, they referred to developing countries’ exports. It is true that UNIDO projects help developing countries gain market access through alleviating supply-level constraints and otherwise promote market access. Strictly speaking, MDG 8, Indicator 8.6 measures the achievement as *‘Proportion of total developed countries imports from developing countries and LDCs, admitted free of duty.’* This indicator and several other MDG 8 Indicators underscore MDG 8’s emphasis on developed countries’ obligations. The intervention logic pathway from UNIDO project output (improved quality of export goods, for example) to tracking the same goods in developed countries’ import statistics might be theoretically possible, but with a great attribution gap and numerous intermediate states.

Moreover, the evaluation reports under review highlighted SMTQ projects’ potential poverty alleviating impact; for example, through safeguarding jobs in an industry faced with export ban or through establishing a plausible link between SMTQ projects and export.<sup>180</sup> The findings indicate that the projects actually or potentially contributed to MDG 1. Some projects might in fact have been funded by ODA provided to help build trade capacity (Indicator 8.9).

Against this background and because MDG 8 targets are not reflected in project strategies, designs, indicators or reporting, the UNIDO contribution to MDG 8 Target A and Indicator 8.6 can therefore be considered to be implicit.

**(b) Targets 8.B and 8.C: Address the special needs of least developed countries, landlocked countries and small developing island states**

In general, much of UNIDO’s technical cooperation is with least developed countries (LDCs) and their needs receive special attention. In 2011, the GC urged UNIDO to implement the 2011 LDC Ministerial Plan of Action that outlined a comprehensive programme of support to LDCs for the decade 2011-2020.<sup>181</sup> It might be plausible that UNIDO advocacy and its projects in LDCs help attract

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<sup>180</sup> As reported in Section 3.1.1 MDG 1, (d) SMTQ above.

<sup>181</sup> GC.14/Resolution 6: Vienna Ministerial Declaration for the LDCs, dated 2 December 2011.

additional ODA to LDCs, especially to those LDCs that are not ‘donor-darlings.’ This is an area where UNIDO could demonstrate contribution to MDG 8 in the form of reporting on the proportion and characteristic of technical cooperation with LDCs. The contribution could be verified by ODA statistics from the LDCs on ODA channelled through UNIDO and total ODA in proportion to GDP (Indicator 8.4). A similar argument would apply to the landlocked countries and small island states.

**(c) Target 8.E: In cooperation with pharmaceutical companies, provide affordable essential drugs in developing countries**

UNIDO is implementing a comprehensive set of projects entitled ‘Strengthening the local production of essential generic drugs in LDCs and developing countries’, which may have the potential to contribute to MDG 8 Target E. The project, which covers activities in 14 countries, provides policy advice, institutional capacity building, and direct enterprise support. In addition, it offers regional and international linkages among generic drug manufacturers. A mid-term evaluation in 2010 assessed the project to be highly relevant for this MDG and indirectly relevant for MDG 1 (Eradicate poverty); MDG 4 (Reduce child mortality); MDG 5 (Improve maternal health); and MDG 6 (Combat HIV/AIDS and other major diseases).<sup>182</sup>

Two components of the projects involving the Southern African Generic Medicines Association was assessed in the South Africa country evaluation, which found that ‘it was difficult to establish the effectiveness of the project as it still had not proven to deliver clear benefits to current and potential members of the Association.’<sup>183</sup> However, the project is still under implementation and presumably the types, quantities, marketing, cost, and affordability of the generic drugs manufactured will be available at the completion of the project.

The MDG Gap Task Force Report on MDG 8 (2011) acknowledged UNIDO’s contribution to target MDG 8.E.<sup>184</sup> UNIDO also reported on the projects, stating that they would contribute to MDGs 4, 5, and 6.<sup>185</sup> However, the progress of MDGs 4, 5, and 6 are measured by the health status of the ultimate target

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<sup>182</sup> UNIDO, Independent evaluation: Strengthening the local production of essential generic drugs in least developed and developing countries, pages 2-3.

<sup>183</sup> CE South Africa, Annex A: Assessment of TC projects, TE/GLO/08/039 and TE/GLO/05/015 (not paginated).

<sup>184</sup> UN, MDG Gap Task Force Report, 2011, MDG 8: The global partnership for development: Time to deliver, page 63.

<sup>185</sup> IDB.38/15, UNIDO support in fostering local pharmaceutical industry in developing countries, with special regard to essential health products, page 10; or UNIDO Annual Report, 2010, pages 4 and 30-31.

population,<sup>186</sup> and although such impact might ultimately occur, extrapolation of benefits to this extent not only amplifies expectations but also entails enormous contribution challenges. One may consider such contributions implicit, but not verifiable.

**(d) Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications**

According to UNIDO's MTPF, 'UNIDO will promote the diffusion of modern and relevant technologies for poverty reduction; particularly through its technology cooperation centres.'<sup>187</sup>

The International Technology Centres (ITCs) offer a variety of applied research and transfer of technology opportunities, mainly through South-South cooperation. Although not private entities (as mentioned in the MDG 8 Target), the Centres might have a potential to contribute to this target. However, according to a narrow interpretation of the MDG target, its achievement is measured by number of telephones, mobile phone, and Internet use (Indicators 8.14, 8.15, and 8.16), which do not typically apply to the UNIDO ITCs.

More importantly, a recent thematic evaluation of the ITCs found that while the ITCs were relevant for providing developing countries with access to new technologies, and while the ITCs might have created some awareness of new technologies, they had not so far been effective in improving developing countries' competitiveness or in strengthening national innovation systems, mainly due to weak linkages to industry or industry-support institutions.<sup>188</sup> Overall, the evaluation assessed the ITCs' capacity to manage for development results 'insufficient' and impact orientation 'low'.<sup>189</sup> Against this background, it is considered unlikely that the ITCs have contributed to MDG Target 8.F or have an eminent potential to do so.

In regards to UNIDO's cooperation with the private sector in the IT area, the evaluation reports did offer one example, in Nigeria; the partnership with Hewlett-Packard for entrepreneurship and IT education. The Nigeria country evaluation

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<sup>186</sup> See Annex 1, Official MDG targets and indicators.

<sup>187</sup> Thematic Evaluation, UNIDO's International Technology Centres, 2011, page ix. Henceforth referred to as TE-ITCs.

<sup>188</sup> TE-ITCs, pages 48-49.

<sup>189</sup> Ibid page 49.

assessed one component of this project, the findings of which are presented in Table 3.7<sup>190</sup>

Table 3.7: Effectiveness of UNIDO-Hewlett-Packard cooperation for entrepreneurship and IT education in Nigeria

Planned results	Status/Assessment (in Nigeria)
<p>Outcome: Alleviated poverty and raised socio-economic living standards of people, in particular, young people and women who will have developed entrepreneurial and related IT skills</p>	<p>Positive feedback on enhanced income levels from some beneficiaries interviewed in the Ebonyi State, but cannot clearly be attributed to the IT training, which was a small – though useful – part of training in also marketing, research and business solutions, as well as networking. Without a detailed survey of beneficiaries, it is not possible to make a fair assessment of the intended project outcome. However, there were some positive signs.</p> <p>No specific focus on gender issues was evident in the training provided.</p> <p><u>Inhibitors:</u> Some trainees could not afford a computer after the course and complained of high transport cost to the nearest Internet cafes and high user fees.</p>
<p>Output 1: Strengthening the existing training centre and network in Africa and the Middle East</p>	<p>The number of training centres was expected to reach 11 in 7 Nigerian states by end 2011. Capacity and impact of training had improved. Content had been strengthened, but effectiveness of certain software was not evident in traditional manufacturing associations. Further training of trainers is required.</p>

The case shows that to confirm contribution to the relevant MDG indicator, namely 8.16 ‘Internet user per 100 population’, surveys of the target beneficiaries are required as well as the ability to compare them with national level data. Again, a wide attribution gap exists between project outcome and the MDG 8 indicators. In addition, or alternatively, this category of projects could be classified under MDG 1, the human dimension of poverty that refers to education.

<sup>190</sup> Country evaluation, Nigeria, pages 26-28. This annually funded global project runs in 14 countries, including Nigeria with a rather limited budget. Table 3.7 is adopted from Table 5, page 27.

**(e) Conclusion on MDG 8**

The interpretation of MDG 8 Target 8.A in UNIDO policy documents appears to be more liberal than the narrow interpretation that was applied in this review of each MDG target statement and indicator. UNIDO’s interpretation emphasizes a general and implicit aim of facilitating market access through, for example, trade capacity building projects. This review would advocate a more strict interpretation, and consider MDG Target 8.A and associated indicators on ODA and market access as solely a measure of donor country commitment to the MDGs. However, UNIDO projects may have the potential to contribute to other MDG 8 Targets, notably to increased ODA to LDCs, landlocked and small island countries, contributing to affordable essential, generic drugs, as well as some specific contribution to making IT technologies available. UNIDO project indicators are not compatible with MDG indicators, but as some projects are still ongoing, there may be room for adjustments. See also Table 3.8 for a summary of the conclusions.

Table 3.8: MDG 8 - Summary of findings

<b>MDG 8 Targets in summary</b>	<b>UNIDO project contributions</b>
Target 8.A: International trading and financial system	No contribution when assuming that this MDG target applies to donors only and when applying strict interpretation of MDG statements and indicators. Implicit long-term potential contribution that would be difficult to verify
Target 8.B: Needs of LDCs Target 8.C: Needs of landlocked countries and small island states	Some contribution through UNIDO advocacy and TC projects. Measurable through country ODA statistics
Target 8.D: Debt problems	No contribution
Target 8.E: In cooperation with pharmaceutical companies, provide affordable essential drugs in developing countries	Potential contribution from projects for strengthening essential drug manufacturing. Indicators need to be compatible with Indicator 8.13: Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	Potential contribution from cooperation project with Hewlett-Packard on entrepreneurship and IT. Could be measured in part by Indicator 8.16 Internet users per 100 population

### 3.5 Reporting on project contributions to the MDGs

UNIDO reports regularly to the Industrial Development Board and the General Conference on its contributions to the MDGs.<sup>191</sup> These reports summarize contributions in general terms, citing examples and also referring to the wider global economic context or environmental developments, including UNIDO's participation in UN-wide mechanisms. The UNIDO Annual Reports also contain information on global MDG progress and trends and examples of relevant projects.<sup>192</sup>

A quick scan of country-level MDG progress reports showed no mention of UNIDO projects, but neither were there any references to other UN agencies.

In a UNDP website showcasing good MDG practices and containing a database of about 197 projects sorted by MDGs, the following three UNIDO projects are featured for MDG 7, Target 7.A: 'Integrate principles of sustainable development into country programmes and policies:' (i) A project in Nigeria that phased out 11 ozone-depleting potential (ODP) tonnes of CFC-11 and CFC-12 by substituting the equipment at a manufacturer of commercial refrigeration equipment; (ii) a project in Zimbabwe that phased out 120 ODP tonnes of methyl-bromide used in the fumigation of tobacco; and (iii) a project in China that saved 193,192 tonnes of CO<sub>2</sub> per year in eight pilot-demonstration projects in four energy intensive sectors (also featured in Box 3.15).<sup>193</sup>

UNIDO has contributed to UN MDG progress and gap reports. Examples include: (i) UN: 'The MDG Report 2011'; (ii) UN: 'Thematic Paper on MDG 1 – Eradicating extreme poverty and hunger', which mentions UNIDO as one of the agencies behind the launching of the 'Green Jobs Initiative';<sup>194</sup> and (iii) UN: MDG Gap Task Force reports on MDG 8 in 2010 and 2011.<sup>195</sup> The 2011 report refers to UNIDO's work in supporting local production of essential medicines.<sup>196</sup>

In summary, the reporting on UNIDO's contribution to the MDGs was scarce and not very visible. Based on the findings in Sections 3.1-3.4, it is likely that the actual or potential contributions to the MDGs have been under-reported.

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<sup>191</sup> See, for example, documents: IDB.37/4 and IDB.38/14/Add.1.

<sup>192</sup> See, for example, UNIDO Annual Report, 2009, pages 29-35, or Annual Report 2010, Chapter 3.

<sup>193</sup> <http://mdgnet.undp.org>, MDG Good Practices and database, also in printed form in UNDP: (2010), Chapter 4, MDG 7: Environmental sustainability, pages 31-31 and 35-38.

<sup>194</sup> UN: 'Thematic Paper on MDG 1 – Eradicating extreme poverty and hunger', page 21.

<sup>195</sup> UN: 'MDG 8: The global partnership for development at a critical juncture', MDG Gap Task force Report, 2010, and UN: 'MDG 8: Time to deliver', MDG Task Force Report, 2011.

<sup>196</sup> Ibid (2011 Report) page 61-63 mentioning document IDB.38.15 as source in foot note 52.

## **3.6 Challenges**

The examination of intervention logics for typical projects revealed several attribution challenges. This section will briefly discuss these challenges, namely, (a) long intervention logics; (b) identification of and dealing with success factors important for achieving impact, including impact drivers; (c) absence of indicators and results monitoring, especially using indicators that are compatible with the MDG indicators. Subsequently, in paragraph (d), the challenges will be linked to the project design process.

### **(a) Long intervention logics**

Most projects had long intervention logics before impacting national level MDG targets and indicators, with MP projects as the exception. The intervention logics for policy-oriented projects were long, with a long time lag for impact to occur, and projects often had little influence on how policies were implemented. Long time lags were also noted for institution building projects as, for example, the case for SMTQ and NCPC projects, often spanning over a decade. Many projects targeted enterprise-level results, using pilot demonstrations in various forms, also with a long pathway to national impact. Long time lag and long intervention logics make tracking of results more complex. At the same time, these characteristics are typical for up-stream, catalytic support and underscore the national authorities' responsibilities in the development process.

### **(b) Success factors**

This review was to identify impact drivers, understood as external factors that would accelerate, boost or facilitate the achievement of impact, including the MDGs. Some impact drivers could be identified, but the evaluation reports mostly referred to a range of external factors, including assumptions (conditions that must be met), additional supportive measures and other favourable conditions beyond project control. For lack of better terminology, these factors could be called success factors. The challenge in many project seemed to be to identify them as assumptions, impact drivers or factors that could be dealt with within the project strategy. The factors mentioned in evaluation reports varied from project to project and could be highly context specific, but some common success factors were observed. These are listed in Table 3.9. A closer look reveals that some factors could in fact be internal to the project and others could fall within the sphere of influence of project counterparts and/or project managers. Thus, the boundaries of the project will determine if a factor is internal or external to the

project and how the project could deal with it, if at all.<sup>197</sup> The evaluation reports offered some suggestions in this regard; also, several Branches and Units had recently looked into this. Some examples are provided in Table 3.9.

Table 3.9: Common success factors

<b>Common factors listed as important for achieving impact</b>	<b>Suggestions on how project teams could deal with success factors</b>
<i>Demand for service or product</i>	Actual demand cannot be controlled by the project, but it need not be a surprise. . In many cases, a pre-project market study or survey could adequately forecast demand. Hence it becomes an internal factor.
<i>Pro-poor selection of target group or sector.</i> Examples: Recent CND projects, SMTQ projects in Sri Lanka's garment and tea sectors	Mostly internal factor as selection is made ex-ante and can be made with pro-poor impact in mind
<i>Specific export market restrictions.</i> Examples: food safety standards, 'shocks and ban', chemical contents	None. Often a reason for government's request for TC
<i>Demand-pull from end-consumers.</i> Examples: Eco-products, green labels, fair trade, workers' conditions	None
<i>Government incentive to apply a new technique, or invest in new technology</i>	Can be influenced if project maintains ongoing policy dialogue with government. Example: Orissa Cluster Initiative
<i>Government enforcing regulation</i>	None
<i>Supportive business development services</i>	None, unless part of same or other UNIDO project
<i>Financial incentives and financial resources.</i> Example for micro-enterprises	May require identifying and linking up with non-UNIDO projects and/or other agencies
<i>Investments in additional SMEs in agro-industry (or value chain) beyond the pilot plants</i>	Agri-business branch seeking to influence this factor through strategic alliance with African investment fund
<i>Infrastructure, electricity, water, access roads.</i> Example: To ensure backward linkages in agro-industry projects or promoting rural SMEs	Often a pre-requisite. Requires large-scale investment

<sup>197</sup> The project boundaries and the definition of the sphere of control, influence and interest, was discussed in the note from the strategic workshops held in mid-2011 See Facilitator's 'Report on the Strategic Workshops and considerations and recommendations on next steps,' page 13.

Common factors listed as important for achieving impact	Suggestions on how project teams could deal with success factors
<i>Scale up pilot demonstrations</i>	Conceive ex-ante strategy on how scaling up will take place, paired with backing for that strategy from government
<i>Awareness building, which is important for replication of pilots.</i> <i>Examples: CND and CP projects</i>	Many projects include awareness building, but more seems to be required
<i>Counterparts and beneficiaries take lead role and are highly motivated.</i> Examples: Ministry of Education in Mozambique for the ECP project, fishermen in Zanzibar for fish processing project, tomato growers in Morocco for methyl-bromide phase-out project  Factor includes transparent and participatory selection process of enterprises participating in pilots.	Pre-requisite and internal to the project. Key for sustainability and impact. Mentioned as such in many evaluation reports  Successful projects engaged local stakeholders in all or part of project design and implementation decisions
Enterprises undertake parallel actions to <i>improve workers' conditions</i>	Attempt to make worker safety and health aspect part of project and/or influence through associated corporate social responsibility actions <small>198</small>

This overview shows that depending on project boundaries, project managers and counterparts may have some leverage in dealing with success factors, and some factors may actually be internal to the project. It requires, however, a pre-conceived project intervention logic where such factors have been identified.

### (c) Indicators and results monitoring

The evaluation reports revealed two challenges in this regard: knowing/deciding what to measure and actually measuring it. In regards to the first challenge, almost all evaluation reports observed that adequate impact targets and indicators were missing, or were too general as a consequence of vague project outcome and objective statements. At the same time, the indicators should also be compatible with the MDG indicators. An attempt to assess the level of compatibility of typical project impact indicators with the MDG indicators is presented in Table 3.10, along with a statement of the feasibility of designing such indicators.

<sup>198</sup> Alternatively, projects might partner with ILO; see, for example, [www.betterfactories.org](http://www.betterfactories.org).

Table 3.10: Compatibility of typical project indicators with MDG indicators

MDG Indicators (Reference number, description)		Level of compatibility / Is it feasible to design MDG compatible indicators?
<i>MDG 1 Eradicate poverty and extreme hunger</i>		
1.5	Employment-to-population ratio	Low / Yes
1.6	Proportion of employed people living below poverty line	Low / Somewhat, requires surveys and more data
1.7	Proportion of own-account and contributing family members	Low / Yes
<i>MDG 3 Promote gender equality and empower women</i>		
3.2	Share of women in wage employment in the non-agriculture sector.	Low / Yes
<i>MDG 7 Ensure environmental sustainability</i>		
7.2	CO <sub>2</sub> Emissions, total, per capita and per \$1 GDP	High / Challenge to aggregate to national level data
7.3	Consumption of ODS	Fully compatible
7.4	Proportion of fish stocks within safe biological levels	Very low / Not feasible
7.5	Proportion of total water resources used	High / Challenge to aggregate to national level data
7.8	Proportion of population using an improved drinking water source	Very low / Not feasible
7.10	Proportion of urban population living in slums	Very low / Not feasible
<i>MDG 8 Global partnership for development</i>		
8.4 and 8.5	ODA received land-locked /small island developing countries as a proportion of their gross national income	Low / Yes, using TC delivery and ODA data
8.6	Proportion of total developed countries import from developing countries and LDCs, admitted free of duty	Very low / Somewhat, requires extensive data mining
8.13	Proportion of population with access to affordable essential drugs on a sustainable basis	Very low / Challenging

MDG Indicators (Reference number, description)		Level of compatibility / Is it feasible to design MDG compatible indicators?
8.16	Proportion of Internet users per 100 population.	Very low / Challenging

In several instances, it would be possible to design indicators that are compatible with the MDG indicators. The area of indicators is vast and the focus of attention on many agencies. For example, the Inter-American Development Bank offers a course to national counterparts and staff on how to develop indicators that are consistent with the MDGs, and aligned to national context.<sup>199</sup> In regards to the second challenge, evaluation reports made similar observations on the lack of reliable monitoring systems.

#### **(d) Linkages to the project design**

If UNIDO projects are to make a visible and measurable contribution to the MDGs, contributions need to be foreseen in project strategy, design, and logframe.

#### ***Formal requirements***

The requirement that projects should aim to contribute towards MDGs is reflected in the 'Guidelines on technical cooperation projects', which mentions that programming efforts should be compatible with national development efforts and policies, in particular, the poverty reduction strategy and the MDG targets and indicators.<sup>200</sup> This requirement has been reflected in projects' relevance, and many country evaluation reports found that projects were *relevant* to one MDG or the-other, but with little specifics about which target or which indicator.

With respect to the project approval process, the Director-General's Bulletin on screening, appraisal, and approval of projects mentions the MDGs once, namely in Annex IX, 'Criteria for prioritizing the allocation of UNIDO freely programmable resources', saying that [quote]: '*the planned outcomes/outputs should clearly indicate what specific results are to be achieved with regard to PB targets for 2010-2011 as well as established international standards and targets (MDGs, etc.)*' [unquote].<sup>201</sup> It is not clear whether the same principle applies to donor-

<sup>199</sup> On-line course entitled: 'Indicators for development', [www.iadb.org/Indicators-for-development](http://www.iadb.org/Indicators-for-development)

<sup>200</sup> UNIDO (2006), Guidelines on technical cooperation programmes and projects, step IP 01.05.00 Approach, page 22.

<sup>201</sup> Director-General's Bulletin: 'Revised System for the Screening, Appraisal and Approval of Technical Assistance Programmes and Projects', dated 31 May 2010.

funded projects or whether these projects could be approved without leading to such results.

These guidelines do not cover the MDGs in a comprehensive manner, especially compared with the prominent role they play in the MTPF and PB.

### ***Project strategy***

Several evaluation reports implied that poverty reduction (MDG 1) was not the main objective of the projects, but that significant contributions to poverty reduction could be made if such effects were taken into consideration during design and implementation.<sup>202</sup> Recently, some work has been done in UNIDO in pro-poor project design and in identifying pilot areas or groups, for example, by the Clusters and Business Linkages Unit. In the case of 'ensuring environmental sustainability' (MDG 7), evaluation reports were less specific, but the project strategy for environment projects should typically anticipate how, for example, enterprise level impact could be translated into wide impact at the national level. Generally, project strategies often focused on the implementation strategy (how to convert inputs to outputs) rather than on the impact strategy (how outputs lead to outcomes that contribute to impacts). It is recalled that the project strategy frames the entire project intervention logic including the impact level. Thus, the strategy for a policy-oriented project, for example, would go beyond the ratification of the policy and anticipate how it would eventually make a difference for the end-beneficiaries. Likewise, the strategy for pilot demonstration would include how they would be scaled up.

### ***Logical framework matrix***

The project strategy frames the design elements of the logical framework (activities, outputs, outcomes, development objective) and defines the project boundaries (between outcome and outputs, and between what is internal to the project and assumptions, which are external to the project). Most evaluation reports included an assessment of project designs, and routinely observed logical framework matrices with vague or general objectives and outcomes statements. Also, many logframes had non-specific indicators (not SMART), and indicators were often not quantified or qualified. The challenge would be to include – if feasible – reference to a specific national MDG target in the objective statement, or to an intermediate state on the pathway to that MDG, and include a corresponding, relevant project impact indicator that is compatible with the MDG indicator.

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<sup>202</sup> IE-Sri Lanka, page 37.

A common feedback from project managers was that too little time was afforded to project design mostly due to tight donor deadlines. The use of a project inception phase had provided some project managers with the possibility to conduct wider stakeholder consultations verify and adjust project design and develop appropriate indicators.

## 4. Conclusions

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This review examined the actual and potential contributions of UNIDO TC projects to the MDGs using a theory of change approach. Taking its starting point in UNIDO's policy statements, the review confirmed that the intended intervention logics for projects implemented under the thematic priorities are in principle aligned with the MDGs. However this level of alignment was achieved only at the time of the MTFP (2006-2009) and made more explicit in the MTFP (2010-2013) and the PB (2009-10) thus several years after the 2003 GC Resolution mandated UNIDO to play a role in the achievement of the MDGs. References in the PB remain general only referring to the overall MDGs rather than to relevant specific MDG targets and indicators. The review found actual and potential contributions to be concentrated in MDG 1: 'Eradicate extreme poverty and hunger' and MDG 7: 'Ensure environmental sustainability'; almost no contributions were identified for MDG 3: 'Promote gender equality and empower women'; and some contributions were identified for MDG 8: 'Develop a global partnership for development'.

Generally, the evaluation reports found UNIDO projects to be highly relevant for achieving the national MDGs, but the actual contributions were dispersed. Only in a few cases did the reports present evidence of systematic, measured (quantitatively or qualitatively), monitored, and reported contributions to the MDGs; more often the reports cited estimates, plausible links, anecdotal evidence, potential contributions or implicit contributions. It is true that many UNIDO projects play a catalytic role in supporting government strategies and plans, involving long intervention logics and long lead time for impact to occur. Notwithstanding these complexities, the review pointed to several factors that also contributed to the dispersed picture of MDG contributions, namely: (i) project strategies tended to focus on implementation strategy with less explicit attention to impact strategy; (ii) many indicators were not directly compatible with the MDG indicators, except with respect to MDG 7; and (iii) lack of monitoring systems. Against this background, contributions to the MDGs could be under-reported. The conclusions are discussed further under four headings: (i) Actual and potential contributions to the MDGs, (ii) project intervention logic, and (iii) ability to measure and track results.

## 4.1 Actual and potential contributions to the MDGs

In its policy documents, UNIDO stated its aim to contribute to MDG 1, MDG 3, MDG 7, and MDG 8, and some documents also mentioned MDG 6: 'Combat HIV/AIDs, malaria and other diseases'. The intended contributions from programme component were many as illustrated in Figure 1.1. Based on the findings of this review, an updated overview of the contributions of programme components to the MDGs is presented below in Figure 4.1. Although the sample of programme components and projects may not cover all potential linkages, Figure 4.1 illustrates some trends as compared to the stated intentions.

The comparison between intended contributions as foreseen in the policy documents and the findings of the evaluation reports confirmed alignment with the MDGs in principle, but revealed that in practice, it was difficult to match UNIDO priorities and definitions to MDG targets and indicators. The review found that MDG contributions were concentrated in MDG 1 and MDG 7, and almost no actual, but potential contributions to MDG 3. Some potential contributions to MDG 8 were observed. Contributions to MDG 6 were implicit, meaning that they were not part of the relevant projects' results frameworks, and consequently, MDG 6 is not included as an MDG to which UNIDO contributes. The contributions from programme C. 3: Environment and Energy to MDG 1 had not been stated in the policy documents whereas such actual or potential contributions were identified.

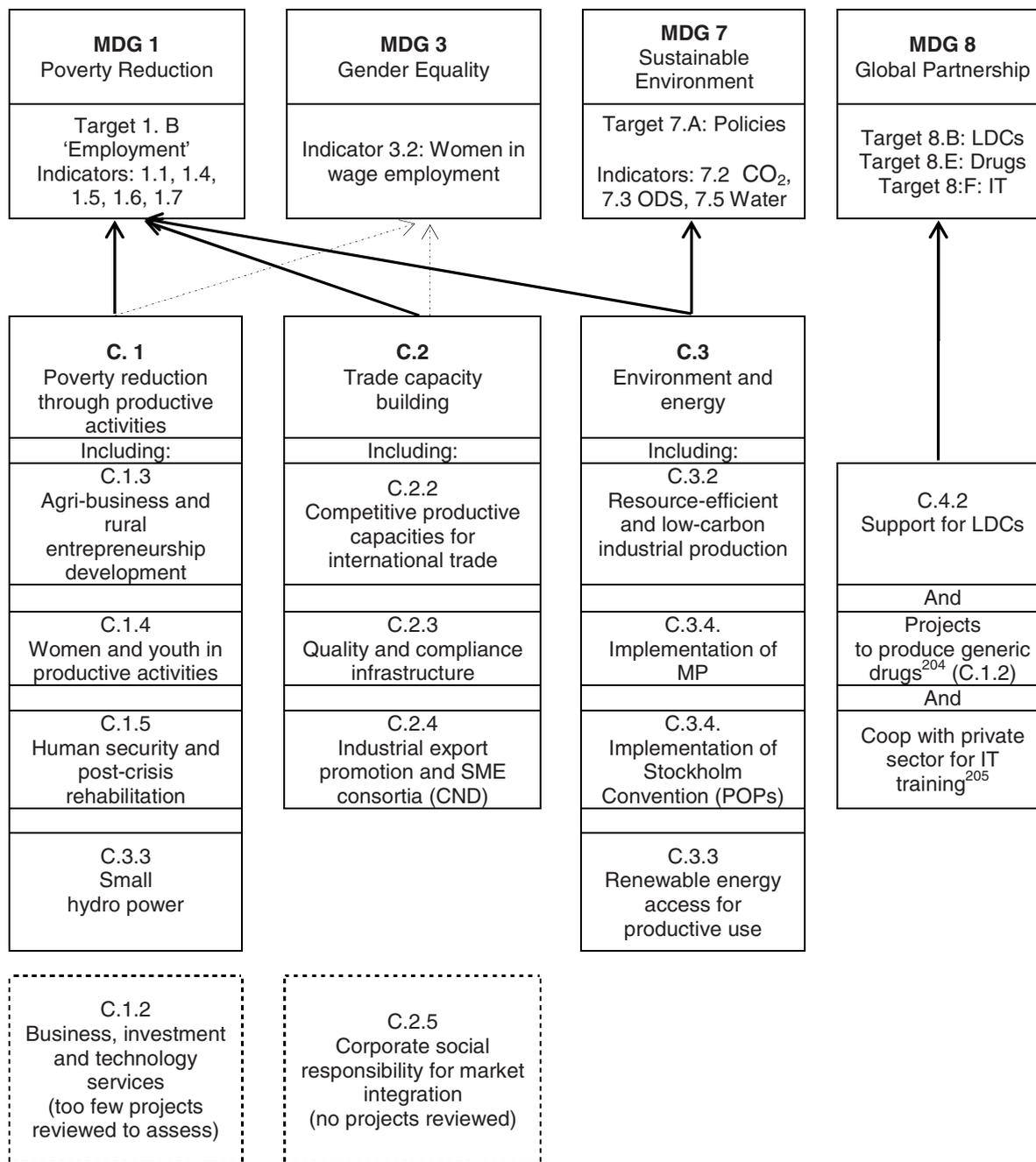
Below are some examples of contributions to each of the MDGs.<sup>203</sup>

The most precise and actual contribution to MDG 1 : 'Eradicate extreme poverty and hunger' was observed from a post-crisis project in Iraq that improved the livelihood of about 670 vulnerable families (MDG 1, Indicator 1.1 and 1.6 concerning people living above the poverty line). An ECP project in Mozambique was estimated, under certain conditions, to have resulted in thousands of youth establishing micro-enterprises (MDG 1, Indicator 1.7 People working for own-account). In principle, agri-business projects contributed to MDG 1, but mostly based on anecdotal evidence or as potential future contributions. Some WED projects fostering women entrepreneurs would add to MDG 1 Indicator 1.7 (Portion of people working for own-account).

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<sup>203</sup> It should be mentioned that most evaluation reports (especially country evaluations) assessed projects that were ongoing, or just completed. Hence, their full impact had not yet occurred.

Figure 4.1: Actual and potential contributions of programme components to the MDGs



- > Full line means well-defined linkages, and actual, estimated, plausible or potential contributions identified.
- - - - -> Dashed line means weak linkages, no actual contributions identified, but potential exists.

<sup>204</sup> Implemented under programme component C.1.2.

<sup>205</sup> Programme component not indicated.

Notably, all projects implemented under the 'Trade capacity building programme' were found to potentially contribute to MDG 1, especially to Target 1.B (Achieve full and productive employment for all). To this end, evaluation reports found plausible links between improved laboratory services, improved product quality, export and jobs, as was the case in the Sri Lanka garment sector. Although poverty reduction had not been an explicit goal of SMTQ projects, they likely contributed to the retention or creation of thousands of jobs. CND projects also contributed to MDG 1, as supported by some anecdotal evidence. The Cluster and Business Linkages Unit has introduced new methodologies for better pro-poor targeting.

Also, some environment projects contributed to MDG 1; for example, a methyl-bromide phase-out project in Morocco secured continued employment for an unspecified, but large number of tomato growers, and a successful sisal-based biogas pilot plant in Tanzania reportedly could lead to increased job creation in the future. Also, SHP projects may potentially contribute to MDG 1, if generated power would be used for productive purposes. Such contributions were perhaps implicit but not explicitly stated in the policy documents and notably the UNIDO results matrix.

Finally, contributions to MDG 1 were enriched by many projects addressing non-economic dimensions of poverty, for example projects promoting food safety, or improvements in workers' health and safety conditions. These contributions were most likely under-reported due to absence of indicators and monitoring.

Contributions to MDG 3: 'Promote gender equality and empower women' was challenging to identify. The MDG 3, Indicator 3.2 'Share of women in *wage-employment*' narrows the definition of the achievement of the goal. Due to lack of gender mainstreaming, little evidence of such contributions was observed apart from the above-mentioned project in Sri Lanka affecting the women-dominated employment garment industry.

The closest alignment between UNIDO programme components and the MDGs and the most direct contributions were found with respect to MDG 7: 'Ensure environmental sustainability'. UNIDO projects contributed directly to MDG 7, Target 7.A (Integrate the principles of environmental sustainability into country policies and programmes) by helping countries to formulate various environmental plans, strategies, policies, and regulations. MP projects demonstrated systematic, measured, monitored, and reported contributions to phasing out ODS, totalling 16 per cent of all developing countries' ODS phase-out by the end of 2011. The evaluation reports also listed quantifiable contributions to the reduction of CO<sub>2</sub> (MDG 7, Indicator 7.2) and to the reduction

of water use (MDG 7, Indicator 7.5). In the latter cases, the aggregation of enterprise level impact and widening impact to the national level was not always obvious.

With respect to MDG 8: 'Develop a global partnership for development', three categories of projects were found to be aligned: (i) projects in LDCs, landlocked countries and small island states (Targets 8.B and 8.C), (ii) projects to promote manufacture of generic drugs (Target 8.E), and (iii) projects in cooperation with private IT companies to make new technologies available to people in developing countries (Target 8.F). The intended contributions of UNIDO Programme C.2: 'Trade capacity building' to MDG 8 was found to be implicit because the MDG targets and/or indicators were not part of the project strategy or results framework, and could not be verified.

## 4.2 Project intervention logic

The intended generic intervention logic, according to the PB programme structure, is generally in line with the MDGs, because it refers to social benefits (jobs and wages) and environmental improvements as beneficial impacts of improved industrial performance.<sup>206</sup> The review confirmed that *projects typically have long intervention logics*; this means that there are many intermediate states between project outputs and ultimate impact. This is particularly true for policy-oriented projects and for institution building projects. Such projects also often feature a *long time lag* from output to impact. The projects working directly with enterprises were the exception, such as MP projects providing technology substitution, or post-crisis projects, where training relatively quickly translated into higher beneficiary income. *Many projects also have complex intervention logics*; this means that projects may comprise several components with multiple counterparts with objectives that follow separate pathways to achieve impact, counterparts and project components may be located in different geographical areas with different contexts and impact drivers; and/or project impact is measured by a range of indicators.

A clear picture of all project-specific intermediary stages between outputs, outcomes, and impact is of utmost importance for project strategy, project design, and implementation. It is at these stages that impact drivers and assumptions play important roles in ensuring that impact actually occurs. It was noted that the 'Guidelines for technical cooperation projects' referred to the MDGs in general terms and did not specifically suggest how the MDGs could be part of the project design. This may have led to project managers regarding implicit relevance for the MDGs as sufficient, while this review shows that this is not the case.

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<sup>206</sup> See Figure 1.2 Generic UNIDO intervention logic.

The scaling-up of pilot demonstrations was the most frequently mentioned impact driver in the evaluation reports. These often concluded that *the scaling-up of pilot demonstration projects was slow, un-systematic and difficult*, although in some cases possibly not recorded or known. Evaluation reports recommended placing pilot demonstration projects within a pre-conceived strategy for scaling up successful pilots. There are several types of pilots, and the review could not establish any particular trend, apart from the fact that rarely were pilots found to multiply effects in a significant manner.

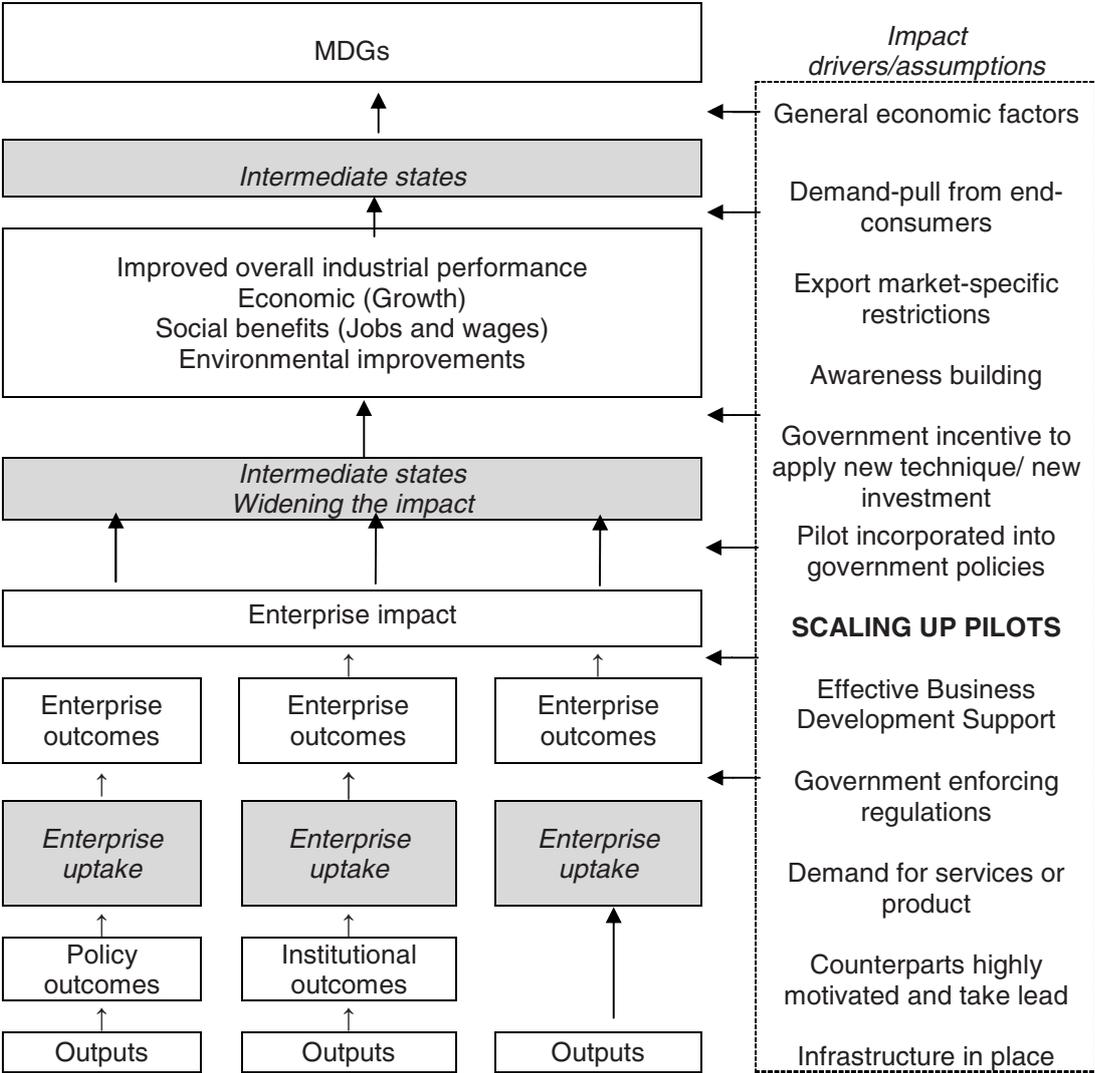
An expanded generic intervention logic is depicted in Figure 4.2, where the grey areas illustrate the intermediate states. Selected impact drivers and assumptions are listed along-side the intervention logic.<sup>207</sup> They are not listed in any particular order because each one would act as assumption or impact driver, depending on the specific project context.<sup>208</sup> The Agri-business Branch and the Cluster and Business Linkages Unit have taken steps to address various assumptions and impact drivers.

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<sup>207</sup> See Table 3.9: Common success factors, for a full listing and suggestions on how to deal with them.

<sup>208</sup> Some may be internal to the project or even be a precondition.

Figure 4.2: Expanded generic UNIDO intervention logic



The upper levels of the modified generic intervention logic would most likely be interlinked with the national results framework as a means to align projects with government strategies. UNIDO not only delivers project outputs, it also follows-through to outcomes, assists counterparts in monitoring assumptions, and, if possible, uses its influence along with counterparts in bringing impact drivers into play to reach project impact. The modified intervention logic also serves as a reminder that the project strategy, in addition to the implementation strategy, encompasses the impact strategy, which spans the entire chain from outputs to final impact.

### **4.3 Ability to measure and track results**

The review found that the low level of compatibility of project indicators with the MDG indicators was an impediment for measuring contributions to the MDGs, in particular with respect to MDG 1, MDG 3, and MDG 8. However, in all cases, there appeared to be scope for defining and including such indicators at the outcome and/or impact level. With respect to MDG 7, the project indicators were fully or highly compatible with the relevant MDG indicators.

Many evaluation reports found that project monitoring was absent and could be reinforced. The lack of monitoring systems contributed significantly to the difficulty in capturing project contributions to the MDGs and could have led to contributions being under-estimated and under-reported. However, monitoring systems for projects with long, complex project intervention logics where impact is achieved after project completion (and after administrative closure of the project) do not ascertain that impact is reported to UNIDO. Hence, no reporting mechanisms are in place whereby UNIDO can monitor project impact after project closure. Evaluations undertaken at or shortly after completion may be helpful, but as was noted in many thematic evaluations, the time lag can be significant for impact to occur.

The lack of post-project reporting not only prevents UNIDO from capturing post-project results of individual projects, it also limits its ability to compare results of several projects implemented under the same programme component across countries, or understand synergies among several projects in the same country.

The thematic impact evaluations reviewed for this study demonstrated the value of accessing results across projects, assuming a longer time horizon and allowing in-depth analysis of intervention logics. These evaluations uncovered important linkages between projects outputs and wider societal impact of technical cooperation interventions and provided insightful recommendations and lessons learned.

MDG targets and indicators reflect national-level and society-wide impacts and cannot be addressed by only one or two projects. Their achievement, monitoring, and reporting is therefore the primarily the responsibility of national authorities who own and lead the development initiatives. According to the Paris Declaration of Aid Effectiveness, it is the obligation of donors and multilateral agencies to use partner countries' results-oriented reporting and monitoring frameworks. Furthermore, efficient national monitoring systems are important in order to ensure transparency and sustainability of development initiatives as highlighted in

the UNDG's Thematic Paper on MDG 1.<sup>209</sup> Project monitoring systems would lay the foundation for continued in-country monitoring and feed into national monitoring systems, either MDG specific systems or the country's regular statistics.

The evaluations contained three examples where specific UNIDO projects supported national monitoring systems, namely the 'Annual Survey of Industrial Production and Performance' conducted in Tanzania, the 'Industrial Capacity and Performance' in Rwanda, and 'Voluntary greenhouse gas accounting' in India. Such national systems are important for national authorities and can also help capture post project results of UNIDO projects if indicators were compatible.

National manufacturing statistics contain employment data of direct relevance to MDG 1 (Indicator 1.5 Employment-to-population ratio), often gender disaggregated. UNIDO project contributions to employment at the sub-sector level, for example, could in many cases be tracked in national statistics, if indicators were compatible with national data. Considering UNIDO's mandate in manufacturing statistics, UNIDO has the potential to provide such data, including data on MDG 3, Indicator 2 "share of women in wage employment.

In regards to feeding into UNDAF monitoring systems and national MDG monitoring system, UNIDO's field office possess a first-hand knowledge that could be exploited when designing compatible project monitoring systems.

Notwithstanding the importance of national monitoring systems, they do not provide a systematic mechanism for reporting on (indirect) MDG contribution of UNIDO project to UNIDO. This implies that UNIDO can only learn of long-term results including MDG contributions, through impact evaluations or other research and analysis.

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<sup>209</sup> UNDG, (undated), Thematic paper on MDG1, Lesson 8, page 34.

## 5.

# Recommendations and lessons learned

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In order for UNIDO's technical cooperation projects to make a more visible contribution to the MDGs, the relevant MDG targets and indicators need to be better highlighted in the PB, and better integrated into planning, implementation and monitoring at the programme and project levels. UNIDO must be prepared to work with long intervention logics, define impact indicators that are MDG compatible, and design adequate project monitoring systems that feed into national MDG monitoring systems. In some cases, additional research, post project analyses and surveys are needed to clarify the linkages between UNIDO projects and the national MDGs in partner countries. Such analyses would also help measure and report on actual contributions to national goals and hereby reveal possible under-reported contributions of UNIDO projects

More detailed recommendations are specified below.

### 5.1 Recommendations

#### (a) *Recommendations to PTC/project managers*

1. Review the national MDG targets to determine if the project has the potential to contribute and how.
2. In designing a project, (a) define a project strategy that enables contributions to a specific MDG target, including important assumptions and presence of impact drivers; (b) include the MDG target, if feasible, in the project objective (impact) statement or a statement that reflects an intermediate state that contributes to a national MDG target; and (c) define impact and/or outcome indicators that are compatible with the respective national MDG indicator or at least will feed into national data on the MDG and are gender disaggregated. See also Table 5.1 for recommendations with respect to specific MDG targets. When a project's main objective is not employment generation (as was noted for SMTQ projects), but some employment benefits are likely to occur, managers should include employment generation into the project intervention logic.

Table 5.1: Recommendations on indicators

<b><i>MDG and MDG Targets to which a project is expected to contribute</i></b>	<b><i>Recommendations on indicators:</i></b>
<p><b>MDG 1:</b> Target 1.B: Full and productive employment and decent work for all</p>	<ul style="list-style-type: none"> <li>• Include indicators that measure employment generated in the concerned manufacturing sub-sector. In accordance with the MDG instruction, data should be gender disaggregated.<sup>210</sup> Such indicators could feed into MDG Indicator 1.5 Employment-to-population ratio</li> <li>• Include indicators that quantify number of self-employed (micro) entrepreneurs expected to result from project</li> <li>• Include reference to national poverty line to reflect that intended income from employment or self-employment will be above poverty line. Such indicator could feed into MDG Indicator 1.6 Employed people living below \$1 (PPP) per day (or national equivalent)</li> </ul>
<p><b>MDG 3:</b> Indicator 3.2 Women in wage employment</p>	<ul style="list-style-type: none"> <li>• Disaggregate intended employment targets for all projects intended to generate employment</li> </ul>
<p><b>MDG 7:</b> Target 7.A: Integrate principles of sustainable development into country policies and programmes</p> <p>Indicator 7.2 Reduction in CO<sub>2</sub> emissions</p> <p>Indicator 7.3 Consumption in ODS</p> <p>Indicator 7.5 Proportion of total water resources used</p>	<ul style="list-style-type: none"> <li>• Make reference to policy or plan generated under policy advice</li> <li>• For energy efficiency projects, include indicator of reduction in CO<sub>2</sub> emissions at (pilot) enterprise level. Include estimate of national aggregated reduction under a set of realistic assumptions</li> <li>• For MP projects, continue to use ODS indicators</li> <li>• For CP projects (including TEST projects), include indicator on savings in water use at (pilot) enterprise level. Include estimate of national aggregated reduction under a set of realistic assumptions</li> </ul>

<sup>210</sup> See Annex 1, Official list of MDGs indicators, foot note.

<b><i>MDG and MDG Targets to which a project is expected to contribute</i></b>	<b><i>Recommendations on indicators:</i></b>
<b>MDG 8:</b> Target 8 E: Provide access to affordable essential drugs	<ul style="list-style-type: none"> <li>• Include indicators on type, and estimated sales prices in specific markets of produced essential generic drugs. Such indicators would feed into national MDG data and/or post-project assessments</li> </ul>

While specific recommendations cannot be made for individual projects, as projects highlighted in this review served as examples of projects within a programme component, specific mention is made with respect to two projects which indirectly contribute to MDG 8, namely

(i) the project(s) for local production of essential drugs: the expected project contribution to MDG 8 Target 8.E (Provide access to affordable essential drugs) should be more specific by including the MDG target in the intervention logic and by introducing impact indicators compatible with the MDG 8 Indicator 8.13 (Proportion of population with access to affordable essential drugs on a sustainable basis); and

(ii) the project executed in collaboration with Hewlett-Packard on IT uses for entrepreneurs: the expected project contribution to MDG 8 Target 8.F (In cooperation with the private sector, make available benefits of new technologies, especially information and communication) should be more specific by including the MDG target in the intervention logic and by introducing an impact indicator compatible with MDG 8, Indicator 8.16 (Internet users by 100 population). If this is not possible, it should be clarified that the project contributes to MDG 1, Target 1.7 (People working for own account);

3. Design and maintain project monitoring systems that monitor outcomes and impact, hence lay the foundation for continuous feeding of data to relevant national monitoring systems and/or national statistics. Include an amount in the project budget for maintaining this monitoring system. Include post-project surveys if some outcomes and impacts are expected to occur after completion.

**(b) Recommendations to PTC Directors and Unit Chiefs**

4. Seek opportunities to integrate research and TC in order to capture and examine post-project results including indirect contributions to national higher level goals such as the MDGs.  
Examples of such analyses would include: (a) Surveys already under consideration in the ECP in Mozambique to verify entrepreneurial activities of ECP graduates; or (b) for SMTQ projects, research-oriented analysis to clarify linkages between better country quality systems and employment; or (c) for cleaner productions projects, surveys to measure enterprise level CO<sub>2</sub> reductions or water savings and estimate national impact; or (d) for SHP projects, analysis of relations between SHP and productive activities.<sup>211</sup>
5. To the gender focal point: (i) With respect to programme component C.1.4 Women and youth in productive activities, clarify the definition of the impact indicators stated in the PB to make it clearer what MDG target the component is contributing to: MDG 1 and/or MDG 3; (ii) In view of the limited recorded contributions to MDG 3, assist programme components managers to construct intervention logics that take the gender perspective into account and which can be used as reference points in future project design work.
6. To the Director, Environmental Management Branch, with respect to programme component C.3 2 RECP: Take advantage of the close alignment between these programme components and MDG 7, Target A, and in the run-up to 2015, to undertake post-project analysis to capture MDG contributions. This would highlight UNIDO's contribution in these areas.
7. To the Director, Energy and Climate Change Branch and the Unit Chief, MP Implementation Unit: With respect to programme component C.3.4 Implementation of international conventions (MP): (i) Take advantage of the close alignment between these programme components and MDG 7, Target A, and in the run-up to 2015, to undertake post-project analysis to capture MDG contributions. This would highlight UNIDO's contribution in these areas; (ii) .With specific respect to methyl-bromide phase-out projects, include indicators on the expected employment benefits of converting to non-chemical technologies, and seek to quantify such contributions within the concerned agricultural or manufacturing sector. This would make the MDG 1 contribution concrete, visible and trackable.

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<sup>211</sup> Such analyses were also recommended in several thematic evaluations and reviews.

**(c) Recommendation to UNIDO management**

8. For the next PB with respect to the formulation of the 'Major Programme C: Thematic Priorities', make specific reference under each programme component to specific MDG, post-2015 or post Rio+20 (Sustainable Development Goals) targets and indicators to which the programme component is expected to contribute. See Figure 4.1. For example, programme component C.1.3 'Agri-business and rural entrepreneurship development' would potentially contribute to MDG1, Target 1.B (Employment), and to MDG 3 Indicator 3.2 (Share of women in wage employment) which should be stated in the PB; or another example: programme component C.4.2 'Support for LDCs' contributes to MDG 8, Target 8.B (LDCs), which should be included in the PB. UNIDO should not claim contributions to MDG 6: HIV/AIDS, malaria and other diseases, as these were found to be implicit and not part of the intervention logics and frameworks of the individual projects and thus not verifiable.
9. When preparing the UNIDO Annual Report, include data on concrete MDG contributions when and as reported by project managers and/or in evaluation reports.
10. In preparing for the post-2015 development goals, UNIDO should engage in international coordination work, so that the challenges UNIDO identified in areas of its mandate will be addressed in the new goals and other international results framework. Once post-2015 development goals have been defined, UNIDO should integrate them into its own results frameworks and without delay.

**(d) Recommendation to ODG/EVA**

11. The Evaluation Group should in its forthcoming work programme include a MDG-related impact evaluation and it is recommended that this is done in relation to MDG 7.

## 5.2 Lessons learned

1. Paying close attention to the definitions of MDG targets and indicators helps to better understand how projects may contribute to the MDGs and actually contribute.
2. Using project indicators that are compatible with the national MDG indicators increases the relevance of UNIDO.

*And finally,  
in line with William Easterly,  
'Stay focused on the feasible tasks that will do some good'*

# Annex A: Millennium Development Goals, targets and indicators

Official list of MDG indicators Effective 15 January 2008<sup>212</sup>

Millennium Development Goals (MDGs)	
Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
<b>Goal 1: Eradicate extreme poverty and hunger</b>	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below \$1 (PPP) per day 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below \$1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption
<b>Goal 2: Achieve universal primary education</b>	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men
<b>Goal 3: Promote gender equality and empower women</b>	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament
<b>Goal 4: Reduce child mortality</b>	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate 4.3 Proportion of 1 year-old children immunized against measles
<b>Goal 5: Improve maternal health</b>	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate 5.4 Adolescent birth rate 5.5 Antenatal care coverage (at least one visit and at least four visits) 5.6 Unmet need for family planning
<b>Goal 6: Combat HIV/AIDS, malaria and other diseases</b>	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15-24 years 6.2 Condom use at last high-risk sex 6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS 6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria 6.7 Proportion of children under 5 sleeping under insecticide-treated bed-nets 6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs 6.9 Incidence, prevalence and death rates associated with tuberculosis 6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course

MDGs continued.

<sup>212</sup> All indicators should be disaggregated by sex and urban/rural as far as possible.

<b>Goal 7: Ensure environmental sustainability</b>	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.1 Proportion of land area covered by forest 7.2 CO2 emissions, total, per capita and per \$1 GDP (PPP) 7.3 Consumption of ozone-depleting substances 7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used 7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums b
<b>Goal 8: Develop a global partnership for development</b>	
Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system  Includes a commitment to good governance, development and poverty reduction – both nationally and internationally  Target 8.B: Address the special needs of the least developed countries  Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction  Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)  Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	<i>Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.</i> <b>Official development assistance (ODA)</b> 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes 8.5 ODA received in small island developing States as a proportion of their gross national incomes <b>Market access</b> 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product 8.9 Proportion of ODA provided to help build trade capacity <b>Debt sustainability</b> 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) 8.11 Debt relief committed under HIPC and MDRI Initiatives 8.12 Debt service as a percentage of exports of goods and services
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Telephone lines per 100 population 8.15 Cellular subscribers per 100 population 8.16 Internet users per 100 population

The Millennium Development Goals and targets come from the Millennium Declaration, signed by 189 countries, including 147 heads of State and Government, in September 2000 (<http://www.un.org/millennium/declaration/ares552e.htm>) and from further agreement by member states at the 2005 World Summit (Resolution adopted by the General Assembly - A/RES/60/1, <http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/60/1>).

The goals and targets are interrelated and should be seen as a whole. They represent a partnership between the developed countries and the developing countries "to create an environment – at the national and global levels alike – which is conducive to development and the elimination of poverty".

<sup>a</sup> For monitoring country poverty trends, indicators based on national poverty lines should be used, where available.

<sup>b</sup> The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of non-durable material.

## Annex B: Role of UNIDO in achieving the Millennium Development Goals, Resolution GC.10/Res.5<sup>213</sup>

9th plenary meeting  
5 December 2003

*The General Conference,*

*Recalling* the adoption of the Millennium Development Goals by the United Nations Millennium Summit,

*Also recalling* the affirmation of the Millennium Development Goals by subsequent international gatherings, including the Monterrey Consensus that emerged from the International Conference on Financing for Development,

*Recognizing* the significance of the Millennium Development Goals to developing countries, in particular the least developed countries, and countries with economies in transition,

*Acknowledging* the important contribution of UNIDO to the achievement of the Millennium Development Goals through effective implementation of its Business Plan, the medium-term programme framework and the Strategic Guidelines "Towards improved UNIDO programme delivery",

*Recognizing* the role of the entire UNIDO membership in supporting programmes to achieve the Millennium Development Goals and of the role of the Secretariat in the implementation of those programmes,

*Noting* that official development assistance increased by 5 per cent in 2002 and further urging donor countries that are not already doing so to fulfil their targets to increase official development assistance,

*Recalling* the statements made by the Director-General to increase technical cooperation programmes to developing countries, particularly in Africa, least developed countries, small island developing States and landlocked developing countries, both in scope and capacity,

*Concerned* that the rate of foreign direct investment in Africa is less than one per cent of the world total,

1. *Encourages* UNIDO to bolster relations with other international organizations and United Nations agencies and to coordinate efforts so as to avoid duplication of activities and to make efficient use of resources;

2. *Requests* the Director-General to enhance technical cooperation activities in industrial capacity-building, particularly for rural energy for productive use and renewable energy;

3. *Also requests* the Director-General to maximize wherever possible the use of national experts and other capacities from developing countries and from countries with economies in transition in all UNIDO activities;

4. *Further requests* the Director-General to ensure to the maximum extent possible that UNIDO activities in support of achieving the Millennium Development Goals are undertaken where appropriate in cooperation with regional and sub-regional organizations and particularly in Africa, through the African Union and the New Partnership for Africa's Development;

5. *Encourages* UNIDO to do more for developing countries, in particular in Africa, in areas of investment and trade promotions in a more sustainable way;

6. *Requests* the Director-General to keep Member States informed in his annual reports to the Industrial Development Board on the implementation of the present resolution.

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<sup>213</sup> Source: GC.10/INF. 4 Decisions and Resolutions at the General Conference, Tenth regular Session, 1-5 December 2003

## Annex C: UNIDO Programmatic results matrix (2010-2013)<sup>214</sup>

<b>INDUSTRIAL DEVELOPMENT FOR POVERTY REDUCTION, INCLUSIVE GLOBALIZATION AND ENVIRONMENTAL SUSTAINABILITY</b>	
<b>1. Poverty reduction through productive activities</b>	<i>Performance indicators:</i>
<b>Expected impact:</b> <i>Women and men are equally empowered to generate and increase their income by engaging in productive industrial activities.</i>	<ul style="list-style-type: none"> <li>• Increased job opportunities, in particular for poor target groups</li> <li>• Increased and equitable levels of income from productive activities</li> <li>• More decent working conditions</li> </ul>
<b>Outcome 1.1: Equitable growth policies</b> Industrial strategies, policies and regulations support equitable and inclusive industrial growth.	<ul style="list-style-type: none"> <li>• Industrial policies set quantified poverty reduction objectives</li> <li>• Inclusiveness and reduced inequality are policy priorities</li> <li>• Industrial statistics monitor the impact of industrial policies on poverty</li> </ul>
<b>Outcome 1.2: Market enabling and investment support institutions</b> National and regional organizations establish market-enabling services for industries and assist them to increase productive capacities.	<ul style="list-style-type: none"> <li>• Support organizations serve increased numbers and types of enterprises</li> <li>• New and better support services become available</li> <li>• Enterprises are satisfied with quality of services</li> <li>• Private service providers emerge and develop</li> </ul>
<b>2. Trade capacity-building</b>	<i>Performance indicators:</i>
<b>Expected impact:</b> <i>Industries are enabled to produce and trade goods and services that meet international public and private industrial standards, and benefit increasingly from globalization.</i>	<ul style="list-style-type: none"> <li>• Increased exports, in particular from poverty relevant sectors</li> <li>• Reduced rejection rates of exported products</li> <li>• New products brought to the global market</li> </ul>
<b>Outcome 2.1: International standards and compliance</b> Policies and regulations enhance opportunities for international industrial cooperation and rule-based, non-discriminatory patterns of trade.	<ul style="list-style-type: none"> <li>• Trade policies give priority to industrial development</li> <li>• Effective policy dialogue between public and private sector</li> <li>• Harmonized framework of trade-related institutions</li> <li>• Enterprises are effectively protected from sub-standard imports</li> </ul>
<b>Outcome 2.2: Standardization and trade support institutions</b> Support organizations adopt and diffuse international public and private industrial standards, provide trade-enabling assistance to enterprises seeking to supply international market opportunities.	<ul style="list-style-type: none"> <li>• National and international standards are aligned and relevant to enterprises</li> <li>• Support organizations serve increased numbers and types of enterprises</li> <li>• Enterprises have access to necessary trade-related services</li> <li>• Enterprises are satisfied with quality of services</li> </ul>
<b>3. Environment and energy:</b>	<i>Performance indicators:</i>
<b>Expected impact:</b> <i>Industries adopt resource-efficient and low-carbon patterns of production and growth, which contributes to mitigating environmental challenges and adapting to climate change, while improving productivity.</i>	<ul style="list-style-type: none"> <li>• Reduced industrial pollution</li> <li>• Better use of natural resources</li> <li>• Increased use of renewable energies</li> </ul>
<b>Outcome 3.1: Industrial sustainability policies and practices</b> Industrial policies, plans and regulations internalize environmental considerations and the sustainable use of goods, services and energy.	<ul style="list-style-type: none"> <li>• Industrial policies define verifiable environmental objectives</li> <li>• Policies and regulations provide incentives for sustainability</li> <li>• Energy policies give priority to productive energy use</li> </ul>
<b>Outcome 3.2: Green industry support services</b> Public and private institutions support industry in complying with environmental agreements and provide services to mitigate negative industrial externalities and to adapt to climate change.	<ul style="list-style-type: none"> <li>• Support organizations serve increased numbers and types of enterprises</li> <li>• Environmental and other enterprise support services delivered in integrated manner</li> <li>• Private service providers emerge and develop</li> <li>• Enterprises have access to renewable energy supply</li> <li>• National institutions effectively implement international environmental agreements</li> </ul>

<sup>214</sup> Reproduced from UNIDO MTPF 2010-2013, document IDB.35/8/Add.1 page 19

## Annex D: Comparison between UNIDO programmatic results matrix and MDG targets and indicators

The comparison below is based on the official list of MDG indicators as presented in Annex 1 and the UNIDO thematic priorities and performance indicators as presented in the programmatic results matrix in the MTPF 2010-2013.<sup>215</sup> With respect to each MDG, the target(s) most closely related to one of UNIDO's thematic priorities is selected and the statements and indicators compared.

### ***MDG 1: Eradicate extreme poverty and hunger***

MDG 1. Targets and indicators	UNIDO thematic priority and indicators
1.B: Achieve full and productive employment and decent work for all, including women and young people	<p><b>Poverty reduction through productive activities</b></p> <p>Expected impact: Women and men are equally empowered to generate and increase their income by engaging in productive industrial activities</p>
1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below \$1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment	<ul style="list-style-type: none"> <li>• Increased job-opportunities, in particular for poor target groups,</li> <li>• Increased and equitable levels of income from productive activities,</li> <li>• More decent working conditions.</li> </ul>

The comparison shows, however, that UNIDO could contribute to MDG 1, Target 1.B through the generation of employment opportunities.

### ***MDG 3: Promote gender equality and empower women***

UNIDO's contribution to MDG 3 is integrated into its contribution to MDG 1, as UNIDO programme component C.1.4. 'Women and youth in productive activities' is part of the 'Poverty reduction through productive activities' theme. The contribution takes place primarily through the Women Entrepreneurship Development (WED) projects and similar projects resulting in women's economic empowerment as well as through gender mainstreaming.<sup>216</sup> UNIDO documentation makes no specific reference of MDG indicator 3.2 'Share of

<sup>215</sup> MTPF, 2010-2013, Programme Results Matrix, Document IDB.35/8/Add.1, page 19.

<sup>216</sup> UNIDO, MDG 3, Brochure, 'Promote gender equality and empower women, UNIDO's contribution: Women Economic Empowerment'. Further official documents on gender mainstreaming or references in MTPFs and PBs may be required.

women in wage employment in the non-agricultural sector', possibly because WED projects are expected to lead to self-employment. However, many other UNIDO activities may result in an increased share of women in wage employment in the non-agricultural sector.

**MDG 6: Combat HIV/AIDS malaria and other diseases.**

In addition, UNIDO projects that strengthen the local production of generic drugs in developing countries contribute to MDG 6.<sup>217</sup> Also other projects may contribute indirectly to MDG 6, namely projects that decrease industrial risks that have an impact on public health (emissions, waste) including the positive benefits of eliminating or decreasing the ozone-depleting substances (ODS) and persistent organic pollutants (POPs) and the work of International Centre for Science and High Technology in Trieste.

**MDG 7: Ensure environmental sustainability**

The MTPFs and the Programme and Budgets (PB) documents refer to this MDG in conjunction with environmental activities but without specifying MDG targets or indicators. To ease comparison, the MDG 7 targets and indicators as well as the UNIDO programmatic results matrix on environment and energy are re-produced below.

<b>MDG 7. Targets</b>	<b>MDG 7. Indicators</b>
<p>Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</p> <p>Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss</p>	<p>7.1 Proportion of land covered by forest</p> <p>7.2 Carbon dioxide (CO<sub>2</sub>) emissions, total, per capita and per \$1 GDP (PPP)</p> <p>7.3 Consumption of ozone-depleting substances (ODS)</p> <p>7.4 Proportion of fish stocks within safe biological limits</p> <p>7.5 Proportion of total water resources used</p> <p>7.6 Proportion of terrestrial and marine areas protected</p> <p>7.7 Proportion of species threatened with extinction</p>
<p>Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation</p>	<p>7.8 Proportion of population using an improved drinking water source</p> <p>7.9 Proportion of population using an improved sanitation facility</p>
<p>Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers</p>	<p>7.10 Proportion of urban population living in slums</p>

<sup>217</sup> UNIDO contributions to achieving the MDGs, Document IDB.38/14, 23 September 2010, paragraph 24, page 7.

## UNIDO Programmatic Results Matrix

<b>UNIDO Thematic priority: Environment and Energy</b>	<b>UNIDO Performance indicators</b>
<p><b>Expected impact:</b> Industries adopt resource-efficient and low-carbon patterns of production and growth, which contribute to mitigating environmental challenges and adapting to climate change</p>	<ul style="list-style-type: none"> <li>• Reduced industrial pollution</li> <li>• Better use of natural resources</li> <li>• Increased use of renewable energies</li> <li>• Reduced ozone-depleting substances (ODS) and carbon dioxide (CO<sub>2</sub>) emissions</li> </ul>
<p><b>Policy outcome: Industrial sustainability policies and practices</b> Industrial policies, plans and regulations internalize environmental considerations and the sustainable use of goods and services</p>	<ul style="list-style-type: none"> <li>• Industrial policies define verifiable environmental objectives and comply with multilateral environmental conventions, protocols and agreements</li> <li>• Legislation and enforcement mechanisms ensure compliance with environmental agreements</li> <li>• Policies and regulations provide incentives for sustainability</li> <li>• Energy policies give priority to energy efficiency and access to clean energy for productive energy use</li> </ul>
<p><b>Institutional outcome: Green industry support services</b> Public and private institutions support industry in complying with environmental agreements and provide services to mitigate negative industrial externalities and adapt to climate change</p>	<ul style="list-style-type: none"> <li>• Support organizations serve increased numbers and types of enterprises</li> <li>• Environmental and other enterprise support services delivered in integrated manner</li> <li>• Enterprises have increased access to clean energy</li> <li>• Enterprises demonstrate increased energy efficiency</li> <li>• Enterprises have adopted ODS-free technologies</li> <li>• National institutions are effectively implementing international environmental agreements.</li> </ul>

As shown, there are many matches, the most obvious between UNIDO policy outcome industrial policies, plans and regulations that internalize environmental considerations and MDG Target 7.A 'Integrate the principles of sustainable development into country policies and programmes.'<sup>218</sup>, Another match is between UNIDO implementation of the multilateral environmental agreements and MDG Indicators 7.2 and 7.3.

<sup>218</sup> The MDG target continues: '... and reverse the loss[word ok?] of environmental resources'. In this context this statement is assume to reflect a positive consequence of such policies and programmes.

**MDG 8: Develop a global partnership for development**

MDG 8 aims at committing developed countries to open their markets; relieve developing countries’ debt; and pay more attention to countries with special needs (least developed, landlocked or small island countries). Accordingly, the indicators measure effects on developed countries, e.g. 8.1 Net official development assistance (ODA) as a percentage of donor’s gross national income; 8.6 Proportion of total developed country import from developing countries admitted free of duty; or 8.9 Proportion of ODA provided to build trade capacity. For the complete set of MDG 8 targets and indicators, refer to Annex 1.

With respect to this MDG, UNIDO assists developing countries in taking advantage of improved market access, primarily through its trade capacity building activities. However, neither the MTPF nor the PB refers to specific MDG targets or indicators. For comparison, the relevant portion of the UNIDO programmatic results matrix is reproduced below.

<b>Thematic priority: Trade capacity building</b>	<b>Performance Indicators</b>
<p>Expected impact: Industries in developing countries are enabled to produce and trade goods and services that meet international public and private industrial standards, and benefit increasingly from globalization</p>	<ul style="list-style-type: none"> <li>• Increased exports, in particular from poverty-relevant sectors</li> <li>• Reduced rejection rates of exported products</li> <li>• New products brought to the global market</li> </ul>

At the same time, the UNIDO MDG brochure lists many more activities that relate to MDG 8, such as industrial policy, business environment and institutional support, agro-processing, technology diffusion, investment promotion, enterprise upgrading for trade enhancement, innovation systems, technology management and foresight, corporate social responsibility as well as standards, metrology, testing and conformity.<sup>219</sup>

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<sup>219</sup> Brochure, UNIDO and the MDGs, pages 9-10.

## **Annex E: Approach paper**

### **Thematic Evaluation of UNIDO's Contribution to the Millennium Development Goals (MDGs)**

#### **Background**

As a specialized UN agency, UNIDO adheres to the Millennium Declaration and the related Millennium Development Goals. UNIDO's work within the three thematic areas of poverty reduction through productive activities, trade capacity building and energy and environment has the potential to contribute significantly to the following four of eight MDGs:

- MDG 1: Eradicate Extreme Poverty and Hunger
- MDG 3: Promote Gender Equality and Empower Women
- MDG 7: Ensure Environmental Protection
- MDG 8: Develop a Global Partnership for Development

The ongoing work of UNIDO in the areas of poverty reduction, inclusive globalization and environmental sustainability are directly related to these MDGs.

In this regard, the UNIDO Evaluation Group (ODG/EVA) has included an independent thematic evaluation of UNIDO's contribution to the achievement of MDGs in the ODG/EVA work programme for 2010/2011, which was approved by the UNIDO Executive Board.

This document outlines the overall framework for the thematic evaluation of UNIDO's contribution to the MDGs. The evaluation attempts to assess the UNIDO contribution to the MDGs and in this sense will be retrospective. In addition, it will be prospective and forward-looking by identifying causal pathways indicating how UNIDO programmes can have an impact on the achievement of the MDGs.

With only a few years left until the target year of 2015, it is clear that progress towards the MDGs has been made. However, it is also evident that often progress has been slower than expected and has been impacted by economic, social and environmental crises.

#### **Purpose**

The purpose of the evaluation is to assess to what extent UNIDO has contributed to the achievement of MDGs or has the potential to do so. Moreover it will assess to what extent contributions to MDGs have been measured and reported on and if necessary provide recommendations on how this can be done.

The evaluation will use a theory of change based approach, identifying causal pathways and intervention logics leading up to the four above mentioned MDGs in order to determine whether UNIDO interventions are represented within these logics and can be realistically expected to contribute to the achievement of the MDGs.

As mentioned above, the evaluation will be both retrospective and prospective. It will be based on a desk review of relevant documentation related to UNIDO strategy, policy and interventions including independent country, thematic and project evaluations conducted in 2010 and 2011. It will be prospective in terms of providing guidance on causal chains where UNIDO projects/programmes could be situated and in formulating indicators on how the contributions could be measured.

### **Scope and focus**

The evaluation will be an impact evaluation with the primary focus of the evaluation to assess UNIDO's actual, expected and potential contribution to the four specific MDGs that fall within the mandate of UNIDO. This evaluation will use a theory of change based approach to create a results chain and determine whether UNIDO interventions have and/or can be expected to contribute to the achievement of the MDGs by the deadline of 2015. The evaluation will analyse the intervention logic and causal relationship between UNIDO's work and the four MDGs which are within the mission of UNIDO.

The evaluation will analyse UNIDO's programmes and projects and the contribution they have made to the MDGs thus far. In addition, the evaluation will provide lessons learned and recommendations for improving UNIDO's contribution to the MDGs and for including assessment methodologies in future interventions, programmes and projects.

The evaluation will use as fundamental information sources UNIDO country, thematic and project evaluations conducted in 2010 and 2011 as well as UNIDO documents related to strategic plans and work programmes of the agency and various branches. The evaluation will review the outputs and outcomes highlighted within these documents to determine their alignment with the MDGs, their position within the intervention logic and the likelihood that they will contribute to the achievement of the MDGs.

It will also assess to what extent UNIDO's contribution to MDGs is represented and can be captured by MDG-level assessments and evaluations carried out by other agencies, at global or national, levels.

## **Key Evaluation Criteria**

The evaluation will assess the impact UNIDO has and can have on the achievement of the four MDGs that fall under the UNIDO mandate. Within the evaluation, the DAC criteria of relevance and effectiveness will also be addressed. The evaluation should address questions related to these criteria in relation to the programmes and projects contribution to MDGs.

### *Relevance:*

In relation to relevance, the evaluation should review whether UNIDO interventions are relevant to MDGs. The evaluation should address relevance at the agency as well as the project and programme level in order to confirm the presence of UNIDO interventions in the theory of change.

### *Effectiveness:*

Using the theory of change developed for each MDG, the evaluation will review whether or not the outputs, outcomes and intermediate states outlined in the theory of change are represented by UNIDO interventions and have been achieved or can be expected to be achieved. Effectiveness will be determined by achievement of project and programme outputs, outcomes and objectives and whether these fit into the theory of change outlined for the MDGs.

Key factors in determining effectiveness will be whether projects and programmes have logical frameworks with outputs and outcomes that are relevant to and show a clear linkage to the MDGs and whether these are represented in the theory of change leading to the MDGs. Whether these logical frameworks have led to a valid work plan and whether UNIDO is able to obtain evidence from these projects in relation to the contribution to MDGs will also be reviewed. In addition to projects and programmes, the existence of an agency wide development objective that is fed by individual projects and programmes and that can be expected to lead to impact and contribution to the MDGs will be reviewed.

## **Approach and Methodology**

The evaluation will serve as an analysis of UNIDO's contribution to MDGs. The evaluation will review to what extent MDG intervention logics exist within UNIDO and developed outputs, outcomes and indicators can be used to assess contributions to MDGs.

As mentioned above, the evaluation will encompass an approach based on a theory of change. A theory of change approach is defined simply as a theory of how and why an initiative works<sup>220</sup>. In more detailed terms, a

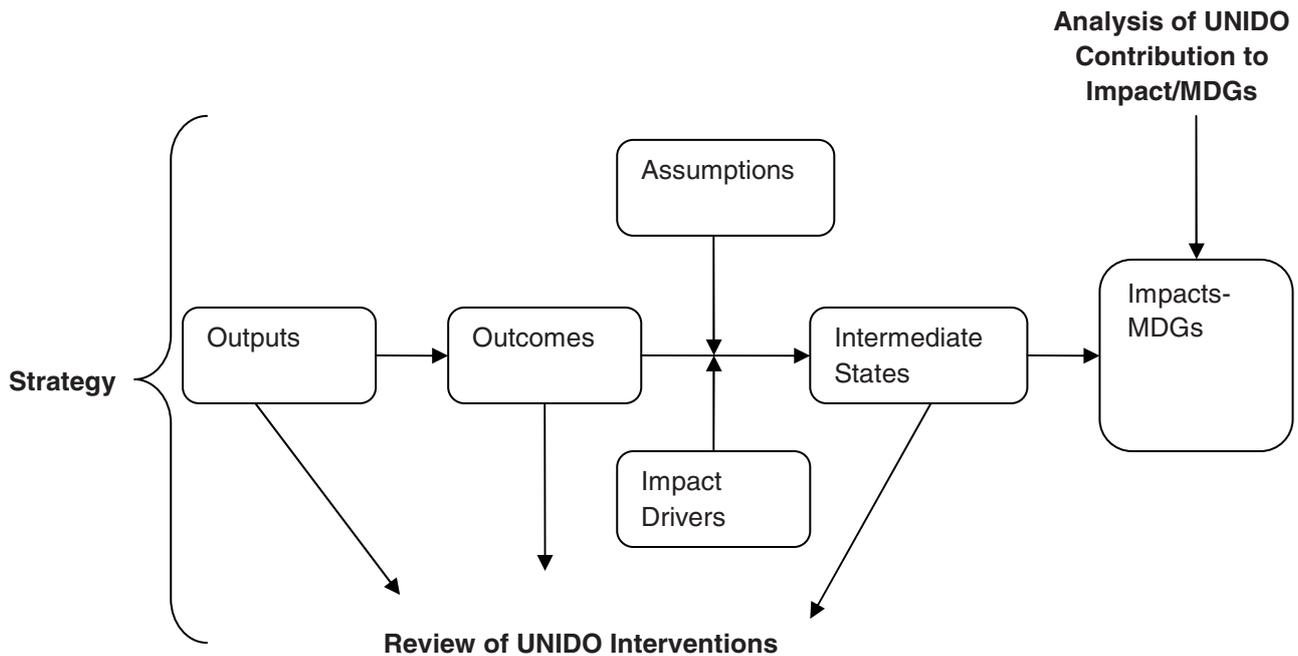
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<sup>220</sup> Wiess, Carol Hirschon. 1972. Evaluation Research: Methods of Assessing Program Effectiveness.

theory of change approach focuses on the early and mid-term changes which must occur in order to achieve the longer term objective of the project or programme. A theory of change approach to the evaluation will describe the set of assumptions that explain the short and mid-term steps that lead to the long term goal of achieving the MDGs and the connections between project and program activities, outputs and outcomes that occur at each step of the way and the achievement of the final objective or goal. As an organization UNIDO has identified its areas of work which directly relate to each MDG. The evaluation will determine a theory of change using this framework.

Based on the outputs, outcomes, impact drivers, assumptions and intermediate states identified, it can then be determined whether or not UNIDO interventions are or can be expected to contribute to the MDGs. The evaluation process will follow the below path:

1. Identification and validation of theory of change for appropriate MDGs
  2. Desk review of UNIDO strategies and work plans, country, thematic and project evaluations and financially or strategically important projects
  3. Comparison of UNIDO activities with theory of change
  4. Identification of contributions by UNIDO to MDGs and theory of change
- Through these steps the consultant will analyze the extent to which UNIDO's contribution to these MDGs can be assessed. In cases, where this is difficult or impossible, the consultant will provide recommendations on processes to build impact assessment methodology into UNIDO interventions.



Specific indicators, against which UNIDO work can be measured, should be developed within this process. This approach will assist in determining whether the intervention logic used for UNIDO programming is appropriate for achieving the MDGs.

By way of the theory of change approach, the evaluation will review and identify the intended outcomes and objectives of UNIDO interventions associated with each of the MDGs 1, 3, 7 and 8. Using the MDGs as the impact to be achieved this evaluation will review UNIDO documentation in order to identify whether or not UNIDO interventions have the potential to create impact in the short and mid-term and lead to the achievement of the longer term impact associated with the identified MDGs.

The evaluation should begin with a desk review of country, thematic and project evaluations conducted during 2010 and 2011. The ODG/EVA mainstreamed MDGs into all country evaluations for the 2010/2011 work programme. These will serve as the foundation for the desk review portion of the evaluation. In addition, thematic and project evaluations conducted and any specific programmes or projects which are substantively important to UNIDO's contribution to the MDGs should be considered for review and inclusion in the evaluation desk review.

Impact related documents such as those produced by NONIE, UNEG and ODG/EVA, including Developing a Methodology for Impact Evaluation at UNIDO: Possible Routes and Options should be reviewed and feed into the evaluation processes.

Finally, various sources of information and research related to the MDGs and industrial development should be reviewed. This will ensure the intervention logic and causal relationships outlined following the desk review are accurate, up to date and logical according to the most current understanding of the issues.

Theory of change will represent the approach to the evaluation and the evaluation will use an appropriate mix of evaluation methodologies including both quantitative and qualitative methods. These methodologies will be used to determine whether activities, outputs and outcomes identified in the results chain exist within the work of UNIDO, have been achieved and have or have the potential to lead the objectives of the individual MDGs.

The desk review should include but not be limited to the following documentation:

- Thematic Evaluation of MDGs Approach Paper
- UNIDO thematic, country and project evaluations
- Project documents and budgets
- UNIDO Annual Reports
- UNIDO programmatic and strategic documents
- Lists of generic outcomes and indicators developed by UNIDO
- Studies related to MDGs
- MDG performance documents, including annual reports
- Country reports on MDGs

The desk review will be complemented by interviews of appropriate stakeholders at headquarters. Interviews should be scheduled with all relevant stakeholders potentially including but not limited to UNIDO directors, unit chiefs, project managers and other staff members working on UNIDO results based management processes. In addition, the consultant should consider organizing focus groups and/or workshops to validate the theories of change identified for each MDG.

The analysis of the data collected as well as the drafting of the report should include measurement of outcomes, outputs and activities identified in the theories of change and an overall assessment of the impact of UNIDO's work on the MDGs.

Based on this analysis the evaluation will provide evidence of the contribution of UNIDO to the MDGs. The evaluation will also provide recommendations on the development of methods to assess UNIDO contributions in the future and how to further align UNIDO interventions to the MDGs.



## Thematic Evaluation of UNIDO's Contribution to the Millennium Development Goals (MDGs)

### **JOB DESCRIPTION**

<b>Post title</b>	International Evaluation Consultant
<b>Duration</b>	30 work days
<b>Date required</b>	21 November 2011 to 31 December 2011
<b>Duty station</b>	Home base with travel to Vienna HQs

#### **Duties**

The consultant will be responsible for drafting a report on UNIDO's contribution to MDGs. The basis of the report will be UNIDO evaluations conducted in 2010 and 2011 and where contributions to MDGs have been covered. Moreover, the consultant will follow a theory-based approach and review to what extent MDG intervention logics exist within UNIDO and developed generic outcomes and indicators can be used to assess contributions to MDGs. The review will be carried out in accordance with the approach paper developed for the review and in consultation with the UNIDO Evaluation Group (ODG/EVA). In particular, he/she will be expected to:

<b>Duties</b>	<b>Duration</b>	<b>Output</b>	<b>Location</b>
<ul style="list-style-type: none"> <li>• Undertake a desk review of pertinent country, thematic and project evaluation reports, complemented by project documents and progress or terminal reports</li> <li>• Review UNIDO planning and strategy documents</li> <li>• Review generic outcomes and indicators developed and used by UNIDO and to what extent these can be used to assess contributions to MDGs</li> <li>• Familiarize her/himself with impact related documents, for instance developed by NONIE, UNEG and ODG/EVA</li> <li>• Analyze reported and planned UNIDO contributions and impact in relation to MDGs</li> </ul>	8 days	<p>Analytical overview of available documents and of UNIDO contribution to MDGs;</p> <p>Evaluation framework</p> <p>List of issues to be clarified and addressed;</p> <p>Interview guidelines for stakeholder interviews</p>	Home base
<ul style="list-style-type: none"> <li>• Briefing with the Evaluation Group at HQ</li> <li>• Briefings and interviews with key informants at UNIDO HQ</li> <li>• Development of theories of change/intervention logics for 4 MDGs relevant to UNIDO</li> <li>• Analysis of the extent to which UNIDO's contribution to MDGs can be assessed and actual assessments if possible</li> <li>• Development of recommendations on how UNIDO projects/programmes and related results can be further aligned to MDGs</li> <li>• Presentation of preliminary findings to relevant UNIDO staff members</li> </ul>	10 days	<p>Data collected and analyzed in alignment with approach paper and evaluation framework</p> <p>Draft findings and recommendations</p>	Vienna
<ul style="list-style-type: none"> <li>• Preparation of draft report</li> </ul>	12 days	Draft report completed and available for circulation	Home base
<b>Total</b>	<b>30days</b>		

**Qualifications:**

- Advanced university degree in public administration, management, economics or other development related field;
- Extensive knowledge and experience in Results Based Management;
- Knowledge of and experience in working with the assessment of higher level objectives, such as the MDGs;
- Extensive experience in the implementation, monitoring and evaluation of development projects;
- Knowledge of UNIDO activities and experience in working with the UN system desirable.

**Language:** English

**Background information:**

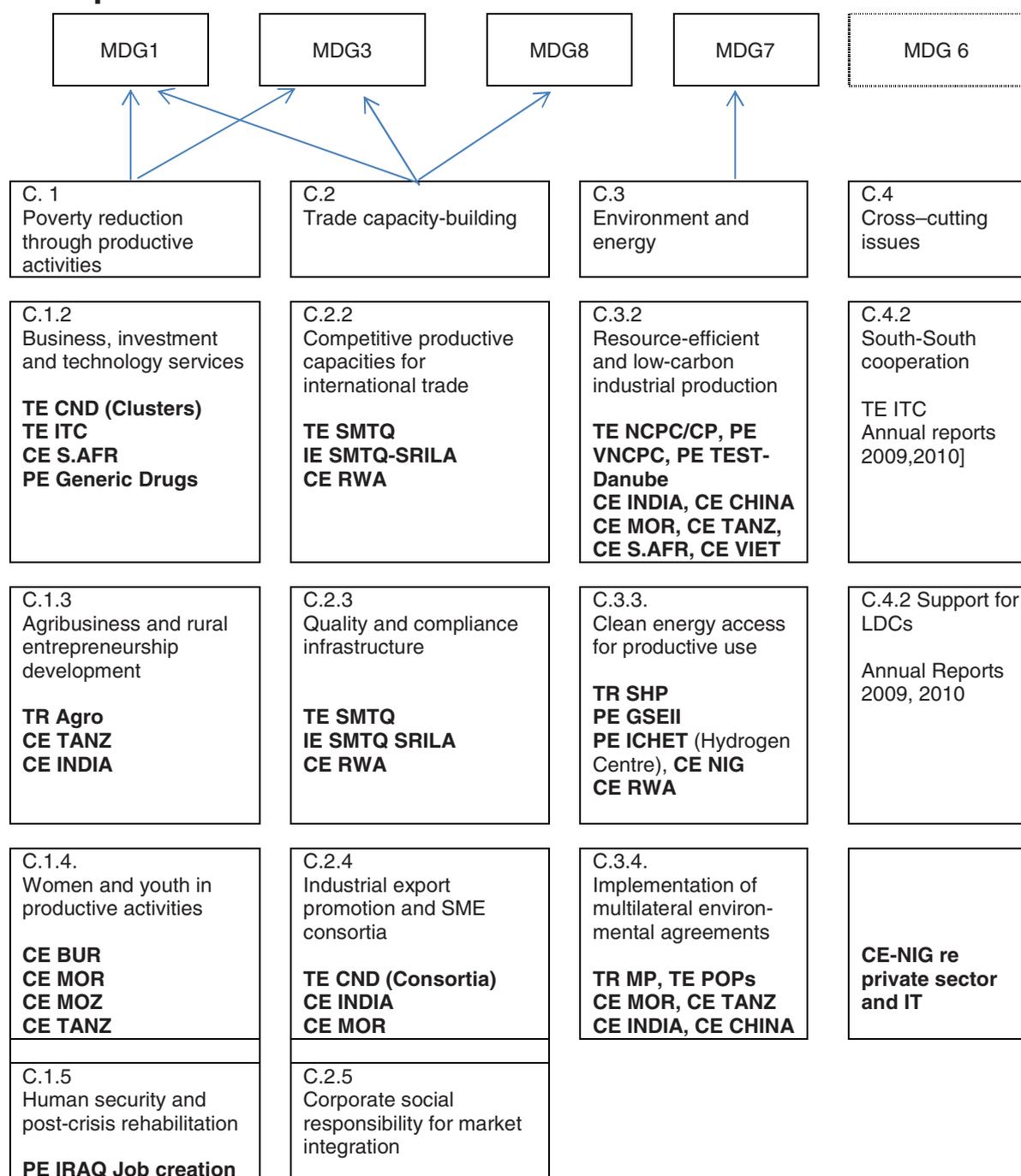
- Thematic Evaluation of MDGs Approach Paper
- UNIDO thematic, country and project evaluations
- Project documents and budgets
- UNIDO Annual Reports
- UNIDO programmatic and strategic documents
- Lists of generic outcomes and indicators developed by UNIDO
- Studies related to MDGs
- MDG performance documents

## Annex F: Evaluation reports reviewed

1. UNIDO, (2010), *Évaluation Indépendante: Évaluation -Pays de la République du Burundi*, Vienna
2. UNIDO, (2010), *Evaluation of the UNIDO export consortia initiative in Morocco*, Project UE/MOR/04/127 and Project UE/MOR/07/007, Vienna
3. UNIDO, (2010), *Independent Evaluation, Sri Lanka: Impact of UNIDO SMTQ Projects in Sri Lanka*, Vienna
4. UNIDO, (2010), *Independent Review: Montreal Protocol Projects, Review to Extract Lessons Learned from UNIDO Montreal Protocol Projects*, Vienna
5. UNIDO, (2010), *Independent Thematic Evaluation: UNIDO Cluster and Networking Development Initiatives*, Vienna
6. UNIDO, (2010), *Independent Thematic Review: UNIDO Projects for the Promotion of Small Hydro Power for Productive Use*, Vienna
7. UNIDO, (2010), *Independent UNIDO Country Evaluation: United Republic of Tanzania*, Vienna
8. UNIDO, (2010), *Meta Evaluation: UNIDO Integrated Programmes, Evaluated in the Period 2007/2008/2009*, Vienna
9. UNIDO, (2010), *Thematic Evaluation Report: UNIDO Activities in the Area of Standards, Metrology, Testing and Quality (SMTQ)*, Vienna
10. UNIDO, (2010), *Thematic Review: UNIDO Agri-Business/Agro-Industry Development Interventions*
11. UNIDO, (2011), *Draft Report, Independent Evaluation Report: South Africa, County Evaluation*, Vienna
12. UNIDO, (2011), *Draft Report, Independent Evaluation: Federal Republic of Nigeria, County Evaluation*, Vienna
13. UNIDO, (2011), *Draft Report, Independent Evaluation: Rwanda, UNIDO Country Programme*, Vienna
14. UNIDO, (2011), *Independent Country Evaluation India*, Vienna
15. UNIDO, (2011), *Independent Evaluation Report: Mozambique, Country Evaluation*, Vienna
16. UNIDO, (2011), *Independent UNIDO Country Evaluation: People's Republic of China*, Vienna.
17. UNIDO, (2011), *Rapport d'évaluation indépendante: Maroc, Evaluation-pays*, Vienna
18. UNIDO, (2011), *Thematic Evaluation of UNIDO's International Technology Centers*, Vienna
19. UNIDO (2011), Independent evaluation, Iraq, *Job creation through Cottage and Micro-Industries Promotion in Al-Qadessiya* (FB/IRA/07/001)
20. UNIDO (20xx) Independent in-depth mid-term review, UNIDO International Centre for Hydrogen Energy Technologies;
21. UNIDO-UNEP (2008), Independent evaluation of the UNIDO-UNEP cleaner production programme;
22. UNIDO (2012) Thematic evaluation of UNIDO's work in the area of persistent organic pollutants, (DRAFT Report)

23. UNIDO (2012) Independent impact evaluation, UNIDO support to the Vietnam cleaner production centre (1998-2010);
24. UNIDO (2012), Independent terminal evaluation, UNIDO Global sustainable energy islands initiative (GSEII), Caribbean region;
25. UNIDO (2010), Independent evaluation, Strengthening the local production of essential generic drugs in least developed/developing countries;
26. GEF (~), Final Evaluation, Transfer of environmentally sound technologies (TEST) to reduce transboundary Pollution in the Danube River Basin.

## Annex G: Evaluation reports mapped by programme component<sup>221</sup>



<sup>221</sup> Notes:

1. Abbreviations refer to: **PE**-Project Evaluation, **CE**-Country Evaluation, **TE**-Thematic Evaluation, **TR**-Thematic Review, and **IE**-Impact Evaluation.
2. Some evaluation reports are repeated because they contain projects relating to several programme components.

## Annex H: Template used to summarize evaluation findings

<p><b>India</b> – Independent UNIDO Country Evaluation (CE) , 2011:          Evaluation of the UNIDO Country Programme, 2008-2012 as well as project implemented since 2007.<sup>222</sup></p>				
<p>The Country Programme has three components with following objectives:  <u>Component 1:</u> <b>To raise the competitiveness of industrial enterprises</b> through the introduction of environment-friendly technologies;  <u>Component 2:</u> <b>To raise the competitiveness of SMEs</b> in relatively backward regions through innovative cluster-based approaches;  <u>Component 3:</u> To facilitate the participation of developing countries in the global economy through <b>south-south cooperation</b>.</p>				
MDG 1	MDG 3	MDG 7	MDG 8	Other MDG
<p><b>CE conclusion</b></p> <ul style="list-style-type: none"> <li>Many projects have a potential for poverty reduction.</li> <li>Cluster development project have shown direct poverty reduction effects.</li> <li>Bamboo project has a clear poverty reduction potential. (p. 88)</li> </ul>	<p><b>CE conclusion</b></p> <p>‘Relatively little has been done to reduce gender disparities. ‘ Gender has not been mainstreamed in projects document and reports.’ (p.88)</p>	<p><b>CE conclusion</b></p> <ul style="list-style-type: none"> <li>Environment portfolio fits MDG 7.</li> <li>Principles of sustainable development have been promoted in national policies and programmes through UNIDO projects.(p88)</li> </ul>	<p><b>CE conclusion</b></p> <p>Some projects on technology transfers aligned with this MDG but Gol targets refer to information and communication technology. (p88).</p>	
<p><b>Relevance</b></p> <p>Private Sector Development projects consistent with national/state level priorities and strategies. (p24)</p>	<p><b>Relevance:</b></p>	<p><b>Relevance:</b></p> <p>45% of Environment and Energy portfolio support Gol meeting its international obligations (Stockholm and Montreal Protocols). (p21)</p>	<p><b>Relevance</b></p> <p>South -South Cooperation activities not mentioned as vehicle for MDG achievement.</p>	
<p><b>Effectiveness</b></p>				
<p><b>Impact:</b></p> <p>Too early to assess impact of 2 projects due to delay in implementation. (p74)          Lack of monitoring data makes it difficult to assess poverty reduction effect (p73)  <b>Pro-poor strategy:</b> 2 projects located in poor state (Orissa).</p>	<p><b>Impact:</b></p>	<p><b>Impact:</b></p> <p><b>Too early to assess</b>, because a majority of projects in pipeline or just starting. Impact indicators have not always been developed. (p70)</p>		
<p><b>Impact drivers/ Inhibitors:</b></p> <p>Counterpart agencies ownership          Challenge in scaling up.</p>				
<p><b>CE devotes a specific section to ‘Contribution to MGDs’</b> (p88). <b>Conclusion:</b> ‘UNIDO being a small actor in a giant country, it is not possible to attribute any distinct contribution of UNIDO to India’s progress towards achieving their MDGs but there is definitely concurrence between the UNIDO programme and the MDGs.’ (p88).</p>				
<p><b>MDG in TOR: Yes.</b> Section on impact assessment: ‘The extent to which the programme contributed (i) to development results (economic, environment, social), including (ii) to the achievement of the MDGs.’</p>				

<sup>222</sup> The Country Evaluation also assessed the performance of the UNIDO Regional Office is not included on any of the summaries.

## Annex I: List of persons consulted

<b>Name</b>	<b>Title</b>	<b>Organizational Unit</b>
Mr. Dimitri Piskounov	Managing Director	Programme Development and TC Division (PTC)
Mr. Sergio Miranda da Cruz	Director	Bureau for Programme Results and Monitoring, PTC
Mr. Jürgen Hierold	Industrial Development Officer	Bureau for Programme Results and Monitoring, PTC
Ms Nilguen Tas	Unit Chief	Competitiveness, Upgrading and Partnership, Focal point for RBM and Gender, BIT, PTC
Mr. Matteo Landi	Associate Expert	Competitiveness, Upgrading and Partnership, BIT, PTC
Mr. Anders Isaksson	Industrial Development Officer	Investment and Technology Unit, BIT, PTC
Mr. Stefan Kratzsch	Industrial Development Officer	Investment and Technology Unit, BIT, PTC
Mr. Heinz Leuenberger	Director	Environmental Management Branch, PTC
Mr. Sidi Si Ahmed	Director	Energy and Climate Change Branch, PTC
Mr. Guillermo Castella Lorenzo	Chief	Montreal Protocol Unit, Energy and Climate Change Branch, PTC
Mr. Pradeep Monga	Director	Energy and Climate Change Branch
Mr. Kentaro Aoki	Associate Expert	Renewable and Rural Energy Unit, Energy and Climate Change Branch, PTC
Mr. Lalith Goonatilake	Director	Trade Capacity Building Branch, PTC
Mr. Stefan Kaeser	Industrial Development Officer	Trade Capacity Building Branch, PTC
Mr. Philippe Scholtès	Director	Agri-Business Development Branch, PTC
Ms. Aurelia Calabro	Unit Chief	Rural Entrepreneurship Development and Human Security Unit, Agri-Business Development Branch , PTC
Ms. Gabriele Ott	Industrial Development Officer	Rural Entrepreneurship Development and Human Security Unit, Agri-Business Development Branch , PTC

<b>Name</b>	<b>Title</b>	<b>Organizational Unit</b>
Ms. Stephanie Promberger	Consultant, Entrepreneurship Curriculum Programme Mozambique	Rural Entrepreneurship Development and Human Security Unit, Agri-Business Development Branch , PTC
Mr. Frank Hartwich	Industrial Development Officer	Rural Entrepreneurship Development and Human Security Unit, Agri-Business Development Branch , PTC
Mr. Gerado Pataconi	Chief	Clusters and Business Linkages Unit BIT, PTC
Mr. Fabio Russo	Senior Industrial Development Officer	Clusters and Business Linkages Unit BIT, PTC
Mr. Sei Hisakawa	Director	Asia and Pacific Programme
Ms. Ayumi Fujino	UNIDO Representative India	Asia and Pacific Programme
Mr. Zhen Wang	Area Programme Officer	Asia and Pacific Programme
Mr. Ho-Seung Lee	Consultant	Asia and Pacific Programme
Mr. Bashir Conde	Area Programme Officer,	Africa Programme
Mr. Victor Djemba	Consultant	United Nations Systems-Wide Coherence
Ms. Julia Peitl	Intern	United Nations Systems-Wide Coherence
Mr. Shyam Upadhyaya	Chief	SQA/DPR/ Statistics
Mr. Michele Clara	Programme Coordinator	SQA/DPR/ Research and Policy Advice Group
<i>Evaluation Group</i>		
Ms. Margareta de Goys	Director	ODG/EVA
Ms. Katherine Aston	Evaluation Consultant,	ODG/EVA
Mr. Peter Loewe	Senior Evaluation Officer	ODG/EVA
Mr. Johannes Dobinger	Evaluation Officer	ODG/EVA
Ms. Henny Andersen	Consultant	UNIDO Contribution to Poverty Desk Study

## Annex J: Logframe (Cashew value chain) in Tanzania<sup>223</sup>

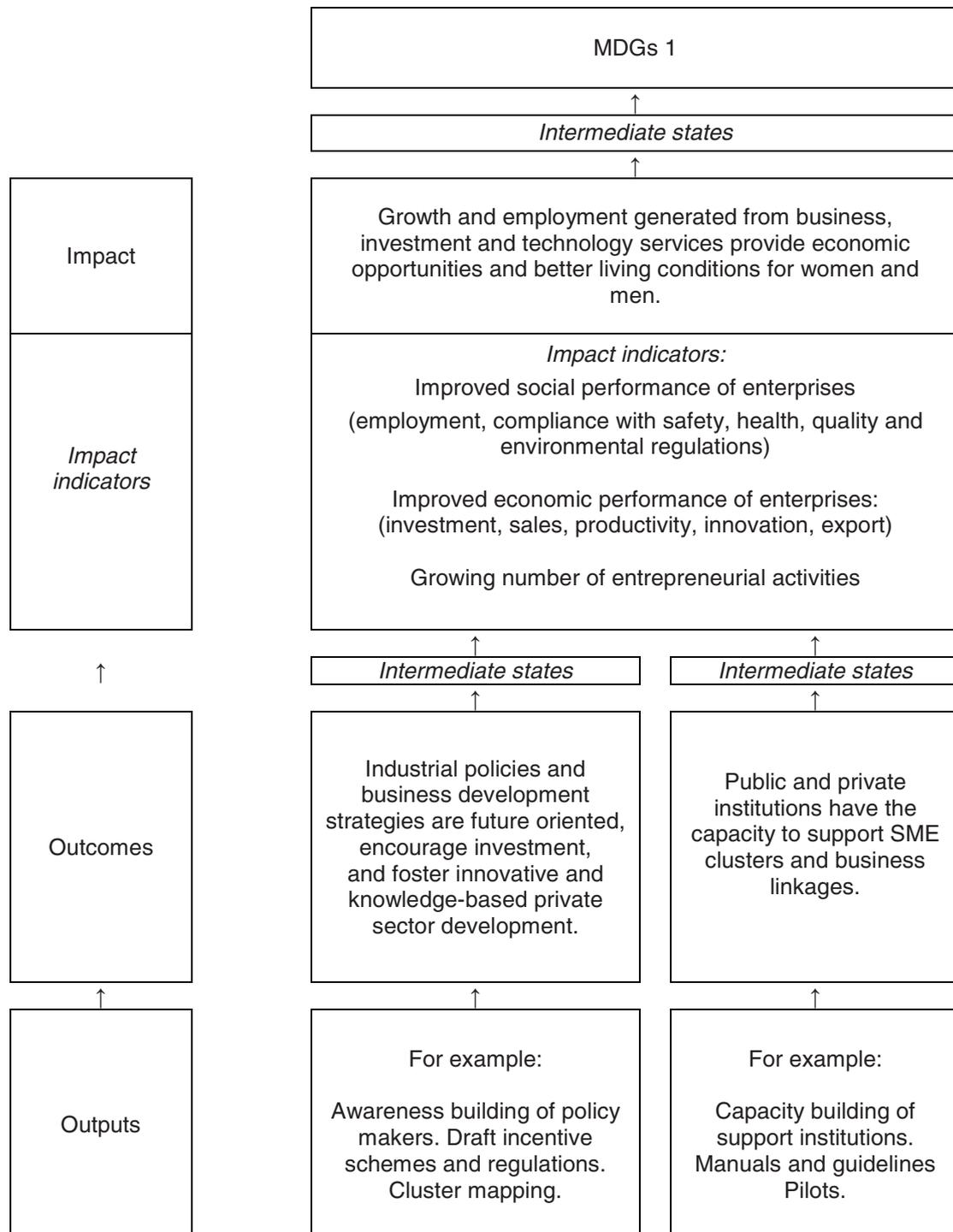
	<i>Intervention logic</i>	<i>Indicators</i>	<i>Sources of verification</i>	<i>Assumptions</i>
Development Goal	Build capacity of primary cashew producers, cashew processing enterprises and associations to participate in competitive and sustainable cashew nut value chains that provide improved income and employment opportunities.			
Outcome	Cashew production and processing builds the basis for sustainable work and income generation by contributing to the value addition and integrated development of the cashew value chain.	<ul style="list-style-type: none"> <li>• \$ of export</li> <li>• Jobs created</li> <li>• Jobs created among women</li> <li>• Jobs created among youth</li> <li>• Additional income per worker</li> </ul>	Provincial government statistics, survey among workers	International and national markets allow for sufficient remuneration of cashew products.
Output 1	<p><b>Primary Production and Input:</b> Technical production capacities and business skills of cashew farmers are improved and extended.</p>	<ul style="list-style-type: none"> <li>• 100 master trainers have been trained with respect to the cashew farming techniques</li> <li>• 600 beneficiaries are trained on improved cashew farming techniques</li> <li>• 400 beneficiaries trained on business administration</li> </ul>	Project reports	Necessary inputs such as pesticides, fertilizers and seeds are made available through public and private providers
	<p>Activities :</p> <p>Improve farmer's access to primary inputs, especially pesticides and spraying machines (funded by MAFSC).</p> <p>Support the rehabilitation of plantations through crafting and replanting through better access to loans of better conditions, campaigning, and providing access to planting materials (funded by MAFSC).</p> <p>Set up efficient training schemes and advisory services that promote good agronomic management of plantations (funded by IFAD).</p> <p>Train farmers/cooperatives in the fields of "farming as business", marketing, budgeting, credit application and logistics (funded by OneUN).</p> <p>Improve farmers' and cooperatives' access to funding (funded by IFAD).</p> <p>Support the organizational development of cooperatives and farmers groups through sensitization campaigns and capacity strengthening (funded by OneUN).</p> <p>Revise existing storage procedures and identify and promote best practices in store keeping via knowledge networks and training courses (funded by IFAD)</p>			
Output 2	<p><b>Processing:</b> Cashew processing businesses' capacities in transformation, design, packaging and utilization of by-products are improved and extended.</p>	<ul style="list-style-type: none"> <li>• 6 pilot pre-processing plants established/upgraded</li> <li>• 2 end processing plants established/ upgraded</li> <li>• 5 interactive training tools created for cashew processing</li> </ul>	Project reports	<p>Government policy does not discriminate processing of cashew nuts</p> <p>Foreign countries such as India does not further subsidize</p>

<sup>223</sup> Project proposal entitled: Support programme for the development of the cashew nut and red meat/leather value chain, Annex I, page 13.

		<ul style="list-style-type: none"> <li>• 400 beneficiaries are trained on business administration.</li> <li>• 4 technical and economic feasibility study developed</li> <li>• 400 beneficiaries are technically trained for cashew by product utilization</li> </ul>		processing of raw cashew nuts
	<p>Activities:</p> <ul style="list-style-type: none"> <li>○ Upgrade and extend existing processing capacities including the rehabilitation of existing machineries, the transfer and introduction of (energy-efficient and cleaner) technologies, demonstrations, and trainings (funded by OneUN, IFAD)</li> <li>○ Initiate transformation of cashew apples into juices, wine and distillates, bio-ethanol, other food products (apple pulps) and livestock/poultry feed. This involves trials, technology diffusion, provision of equipment, technical training and a promotion campaign (funded by OneUN).</li> <li>○ Propagate development of other by-products (gum arabicum, cashew nut shell pellets, CNSL derivatives). This involves trials, further study of technical feasibility and economic profitability, diffusion of the technology to interested entrepreneurs and training (funded by OneUN).</li> <li>○ Train processor in the field of management and business administration through setting up a functioning public/private advisory service network, curriculum development, and training of service providers/trainers. (funded by OneUN)</li> <li>○ Improve processors access to funding through training of bankers, development of financial products, setting up of guarantee schemes and the support to processors to develop fundable business proposals. (funded by IFAD)</li> <li>○ Improve packaging of cashew products identifying and promoting cheaper options of packaging materials, support to logistical planning and forward contracting with importers/suppliers, and the organization of sourcing of materials in bulk. (funded by AFDB)</li> </ul>			
Output 3	<p><b>Market and Trade:</b> Strengthening the marketing capacities of the beneficiaries to ensure all the processed products find market.</p>	<ul style="list-style-type: none"> <li>• 400 beneficiaries trained in good practices and quality standards applicable in cashew production and processing</li> <li>• Setting up a web-based electronic auctioning and marketing system</li> <li>• Number of marketing campaigns launched</li> </ul>	Project reports	Other producers and processors of raw cashew nuts do not increase their level of competitiveness exorbitantly
	<p>Activities:</p> <ol style="list-style-type: none"> <li>3.1 Study opportunities for marketing of cashew products locally and internationally (funded by OneUN)</li> <li>3.2 Launch a branding and marketing campaign to promote cashew consumption among consumers in Tanzania (funded by OneUN)</li> <li>3.3 Introduce principles of quality control and food safety into processing and marketing of cashew nuts including Good Manufacturing Practices (GMP) and Good Hygienic Practices (GHP) as well as food safety standards such as Hazard Analysis Critical Control Points (HACCP) and ISO 22000). (funded by OneUN)</li> <li>3.4 Set up a market information system that provides efficiently information on prices for raw and processed cashew nuts to all stakeholders. (funded by IFAD)</li> <li>3.5 Improve the efficiency in auctioning raw cashew nuts through working out modalities to enable producers and processors getting more direct access to international buyers for raw nuts</li> </ol>			

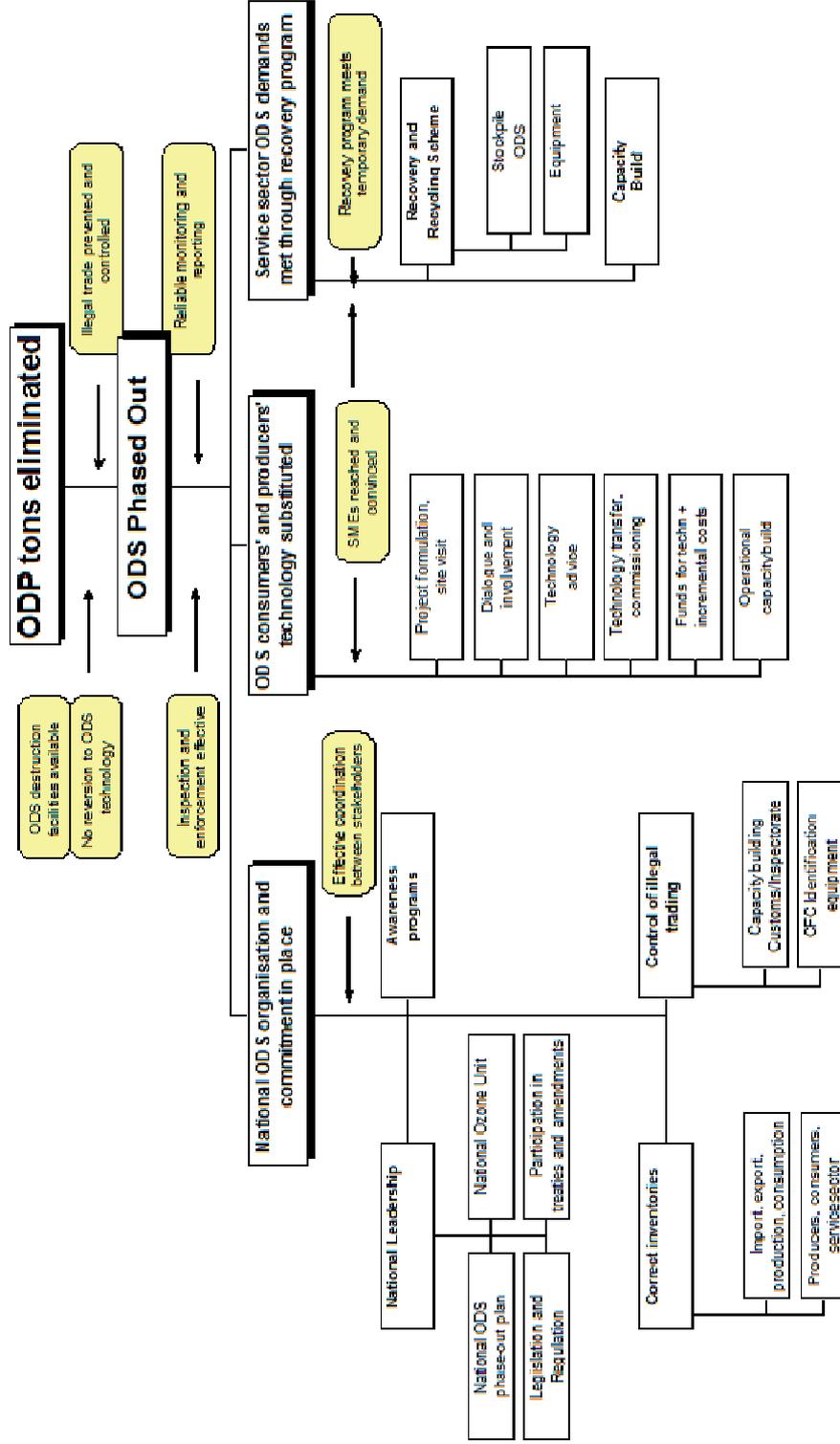
	and kernels and vice versa (funded by MIT).			
Output 4	<b>Value-Chain Governance:</b> Improve organization and governance of the value chain to make them competitive.	<ul style="list-style-type: none"> <li>• 400 beneficiaries trained on organization development</li> <li>• Number of policy makers (CBT and MIT) trained and sensitised</li> <li>• Number of actors in the value chain</li> </ul>	Project reports	
	<p>Activities:</p> <p>4.1 Strengthen the Cashew nut Processors Association of Tanzania and the cooperatives and unions through measures of organizational development, promotion of benefits to members and capacity strengthening in administration. (funded by OneUN)</p> <p>4.2 Strengthen the Cashew Board of Tanzania (CBT) through organizational development, staff motivation, access to knowledge resources and training (funded by OneUN).</p> <p>4.3 Revise the existing regulations on cashew nut levies so they get reinvested in the development of the processing sector, e.g. in capacity strengthening of processors and R&amp;D on technical solutions. (Funded by MIT).</p> <p>4.4 Reduce the regulations and licenses that are required to sell, buy and trade cashew products. (funded by OneUN)</p> <p>4.5 Promote elaborated contracting between producers/cooperatives/groups and processors/buyers (funded by OneUN)</p> <p>4.6 Introduce schemes of combined (value chain) finance of production and processing (funded IFAD)</p> <p>4.7 Strengthen provision of chain support services such as R&amp;D, multiplication of planting material, vocational training, etc. (funded by IFAD).</p>			

# Annex K: General intervention logic for programme component C.1.2: Business, investment and technology services<sup>224</sup>



<sup>224</sup> PB 2012-2013, page 45.

# Annex L: Theory of change for MP projects <sup>225</sup>



<sup>225</sup> TR MP page 18. [Not possible to include indication of Output which covers components from below until the three main outputs (NOU in place, ODS substituted, service sector demand covered), then outcomes, and impact is ODP tons eliminated.]

## Annex M: References

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