

Independent Evaluation

Republic of Sierra Leone

Rehabilitation of training-cum-production centres in vulnerable communities of Bo, Kpandebu, Pujehun, Kailahun and Koindu

UNIDO Project Number: TF/SIL/11/002



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO EVALUATION GROUP

Independent Evaluation

SIERRA LEONE

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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¹ <http://hdrstats.undp.org/images/explanations/SLE.pdf>

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Abbreviations and acronyms

| | |
|---------|--|
| ABC | Agricultural Business Centre |
| AMC | Programme Approval and Monitoring Committee |
| BIC | Business Information and Communication |
| BOQ | Bill of Quantities |
| CAADP | Comprehensive Africa Agriculture Development |
| CTA | Chief Technical Advisor |
| DAC | Development Assistance Committee |
| DSTV | Satellite TV |
| ECF | Extended Credit Facility |
| FBO | Farmer-Based Organization |
| GC | Growth Centre |
| GHI | Global Hunger Index |
| GOJ | Government of Japan |
| HDI | Human Development Index |
| HQ | High Quarter |
| IITA | International Institute for Tropical Agriculture |
| ILO | International Labour Organization |
| IMF | International Monetary Fund |
| IP | Integrated Programme |
| Le | Leone (Sierra Leone currency) |
| PM | Project Manager |
| MAFFS | Ministry of Agriculture, Forestry and Food Security |
| MDG | Millennium Development Goals |
| MOFA | Ministry of Foreign Affairs of the Government of Japan |
| MoTI | Ministry of Trade and Industry |
| MoU | Memorandum of Understanding (MoU) |
| MRU | Mano River Union |
| MSME | Micro Small and Medium Enterprises |
| NDS | National Development Strategy |
| NSADP | National Sustainable Agriculture Development Plan |
| NPC | National Project Coordinator |
| PA | Project Assistant |
| PAD | Project Allotment Document |
| PD | Project Document |
| PCA | Peace and Conflict Assessment |
| PM | Project Manager |
| PMT | Project Management Team |
| PPE | Personal Protective Equipment |
| PRS | Poverty Reduction Strategies |
| PRSP II | Second Poverty Reduction Strategy |
| PSC | Project Steering Committee |

| | |
|---------|---|
| PV | Solar Photovoltaic |
| RRE | Renewable and Rural Energy |
| SABI | Sierra Leone Agribusiness Initiative |
| SMART | Specific, Measurable, Achievable, Relevant & Time-bound |
| SME | Small and Medium Enterprises |
| SCP | Smallholder Commercialization Programme |
| TERI | The Energy and Resources Institute (TERI) |
| TNA | Training Needs Assessment |
| ToR | Terms of Reference |
| ToT | Training of Trainers |
| TPO | Technical Project Officer |
| UNIDO | United Nations Industrial Development Organization |
| UNIPSIL | United Nations Integrated Peace Building Office in Sierra Leone |
| UNSC | United Nations Security Council |
| UR | UNIDO Representative |
| USD | United States Dollars |
| VTC | Vocational Training Centre |
| WFP | World Food Programme |
| YEN | Youth Employment Network |

Glossary of evaluation related terms²

| 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 development intervention's objectives were achieved, or are expected to be achieved. |
| Efficiency | A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results. |
| Impact | Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention. |
| Indicator | Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention. |
| Lessons learned | Generalizations based on evaluation experiences that abstract from the specific circumstances to broader situations. |
| Logframe (logical framework approach) | Management tool used to facilitate the planning, implementation and evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcome, impact) and their causal relationships, indicators, and assumptions that may affect success or failure. Based on RBM (results based management) principles. |
| Outcome | The likely or achieved (short-term and/or medium-term) effects of an intervention's outputs. |
| Outputs | The products, capital goods and services which result from an intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes. |
| Relevance | The extent to which the objectives of an 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. |

² Based on a glossary prepared by OECD's DAC working party aid evaluation, May 2002

Executive Summary

Introduction and background

An independent final evaluation has been conducted on the project “Rehabilitation of training-cum-production centres in vulnerable communities of Koindu, Kpandebu and Pujehun in Sierra Leone”. The overall objective of the project launched in March 2011 was to contribute to the efforts of the Government of Sierra Leone to improve the resilience of targeted communities in the border areas of the country through improved entrepreneurial, leadership and management skills for youth, and enhanced capacities to undertake diversified income generating activities.

The project was funded through a US\$ 2 million grant by the Government of Japan (GOJ) through the Supplementary Budget of the Japanese Ministry of Foreign Affairs. This was part of an overall contribution of US\$ 9.8 million from the GOJ for the execution of seven (7) projects “Response to humanitarian crisis in Africa”, which was part of UNIDO’s interventions in post-crisis settings. A Note Verbale was issued from the Permanent Mission of Japan in Vienna on 8 December 2010. The project started on March 1st, 2011 with UNIDO as the executing agency while the counterpart was the Ministry of Trade and Industry.

The Programme Approval and Monitoring Committee (AMC) decision of 10 December mandated an independent final evaluation of the projects in 7 countries receiving Japanese contributions for post-crisis interventions. The main objectives of the final evaluation were to contribute both to future UNIDO cooperation with the Government of Sierra Leone and UNIDO’s institutional learning in short-term, post-crisis interventions.

Evaluation mission and methodology

The evaluation field mission took place in July and August 2012 with a team of 2 consultants (Mr. Simon Taylor, Team Leader; and Ms. Leila Salehiravesh, Evaluation Consultant). The evaluation was designed as a forward-looking exercise to identify best practices and lessons, and to assess the relevance, efficiency, effectiveness, impact and sustainability of the project.

The evaluation was conducted in compliance with the UNEG norms and standards. Data collection methods ranged from desk reviews (country reports and national development plans, project and programme documents etc.) to individual interviews, focus group discussions and surveys of beneficiaries, project visits and site observation. The evaluation also reviewed a number of earlier evaluation reports of relevance. An objective approach was applied seeking the views of all stakeholders, and validating the data through triangulation of sources, methods, data, and findings.

Country context

Sierra Leone is recovering from a brutal civil war that was started in March 1991 in the small city of Kailahun in the western part of the country and expanded to the rest of the country. The conflict ended over a decade later in 2002 just after rebel groups were pushed out of Freetown and eventually defeated by international forces. The war was marked with atrocities of the Revolutionary United Front (RUF), which recruited and drugged child soldiers, amputated limbs of dissidents, used sexual violence against women, and terrorised the whole population, financing its actions by trading in 'blood diamonds'.

According to most analyses, the conflict was fuelled for the most part by disadvantaged young people who were marginalised from the country's political and economic activities. It took a heavy toll on the lives of more than 50,000 Sierra Leoneans, and forced another 2 million to flee their homes and the country, out of a total population of around 7 million. The war caused capital and physical destruction and wiped out the institutional memory of the country.³

In 2006, the UN Peace building Commission (PBC) selected Sierra Leone to receive its Peace Building fund, identifying youth employment as a priority issue for peace consolidation.⁴

Project background

The UNIDO project is a relatively complex intervention with several components and ambitious development goals within a limited implementation period of 12 months. The intervention addressed several segments of the value chain, including enhancing the institutional capacity of the GCs by updating their infrastructure, improving their human resources through provision of training-of-trainers (ToT) and management workshops as well as training provision to youth in disciplines that were seen as likely to increase their chances for employment and income.

In the course of implementation, two further project sites were added to the initial plan: a Growth Centre (GC) in Bo as well as a number of local enterprises in Kailahun in the eastern part of the country.

Assessment

A rather weakly designed Log Frame limited the evaluability of the project, as did the fact that a number of outputs were still in mid-implementation when the evaluation took place.

³ <http://www.unhcr.org/refworld/publisher,IRIN,,SLE,49af98781e,0.html>

⁴ <http://www.unhcr.org/refworld/publisher,IRIN,,SLE,49af98781e,0.html>

Project identification and formulation

With regard to project identification and formulation, UNIDO considered its previous interventions in Sierra Leone in the project formulation process. The components of this intervention emerged, in great part, from the recommendations and the lessons learned from the 2004 - 2008 UNIDO Integrated Programme as well as the Mano River Union project (2008 - 2010).

The GCs within the communities in border areas of Sierra Leone have been a familiar setting for UNIDO since the 1980s, and in the aftermath of the civil war they served for training purposes by other development agencies. By selecting these existing entities to be used as training-cum-production centres, UNIDO chose an approach that suited the conditions of a short-term, post-crisis intervention.

By targeting youth unemployment in conflict-affected areas, the project addressed a major security challenge in Sierra Leone. This indicates that **conflict sensitivity analysis**, including stakeholders and target group analysis, was considered by UNIDO in the course of design and formulation of the project.

Although it was not mentioned in the project document, the project clearly attempted to develop agricultural value chains by enhancing the infrastructure and human resource capacity of the Growth Centres, and to provide unemployed youth with income generating skills. These activities aimed to bring about added value for marginalised members of the respective communities.

Relevance

The project is considered to be of high relevance. The development goal of the intervention is clearly in line with the poverty reduction strategies of the Government of Sierra Leone. Improving the infrastructure of GCs, including equipping them with solar Photovoltaic systems, and using them as training-cum-production centres to provide vocational training to the unemployed youth is in line with the priorities of the government in its agenda for change 2008-2012.⁵

The project approach was in line with Sierra Leone's planned and ongoing programmes, projects and policies in agribusiness and rural areas; in particular the project was designed to support the priorities of PRSP II "An Agenda for Change". The capacity development of the GCs to expand agro-processing to a commercial scale and to undertake collective marketing and training of youth in food-processing as well as entrepreneurial skills and attitude would support the third priority "Enhancing Productivity in Agriculture and Fisheries".

However, a lack of a partnership with the Ministry of Agriculture, Forestry and Food Security detracts from the relevance of the project as the Ministry is the

⁵ The Sierra Leone Government "An Agenda For Change" (2008-2012)

governmental body concerned with reducing poverty and food insecurity, and developed the National Sustainable Agriculture Development Plan (NSADP). The NSADP is a broad sector-wide framework for achieving the objectives of “Agenda for Change”.

The two components of the project, technology transfer (solar photovoltaic – PV - systems) as well as building up local productive capacities are the traditional areas of UNIDO’s expertise. By selecting GCs in remote areas and provision of skill training to the youth of the rural communities, UNIDO addressed the appropriate target group to tackle unemployment among the most marginalised population of the country. Moreover, by promoting trainings in off-farm areas such as food processing, the project is tackling the food security challenge in rural areas.

The evaluation team identified challenges with regard to project management and coordination. In particular, the centralised management system of UNIDO, which requires most financial, procurement as well as human resource issues to be dealt with through HQ, slowed down the implementation process and affected the quality of deliverables. In addition, staffing shortages at the field level caused inadequate transparency, communication, monitoring and coordination of project activities.

Furthermore, field-based project personnel experienced delays in contract issuances and payments, often working on shorter than expected contract durations and salaries that would benefit from upgrading. Moreover, the absence of a project coordinator in the field resulted in a communication gap between UNIDO and the beneficiary GCs. This resulted in some avoidable implementation problems, for example in the specifications and use of the PV systems in relation to the training and agro-processing activities.

A lack of a feasibility study or a risk analysis resulted in adjustments and delays in procurement plans and a shortage of funds, which in turn had a bearing on the quality of training for the direct beneficiaries. In particular, spending a big portion of the funds on rebuilding the Growth Centre in Bo left little for realizing some outputs such as expanding the premises of other centres and providing them with the required equipment.

Efficiency

The evaluation team considers the intervention as inefficient, as demonstrated by the need to extend the project twice by 6 months in total. It is noted that all “Response to humanitarian crisis in Africa” projects of UNIDO had to be extended in order to complete the original objectives due to the complexities of interventions in remote and post-conflict areas.

Despite the provision of skills training in conflict affected areas being a challenging task for the project team, the project was successful in conducting

ToT in neighbouring Guinea, as well as organizing management skills workshops for management of the centres. The project has also brought about some unplanned outcomes by involving the country's private sector through enhancing the capacity of local enterprises and using them to serve as workshops to provide on-the-job trainings. Further, the project contributed to "the Centre of Excellence in Entrepreneurship Studies and Training" of the Njala University, the second largest university in the country, by developing the entrepreneurship curriculum and conducting training for university instructors.

A decision by project management against providing trainees with food or wages for the duration of training led to dropouts among those who live hand-to-mouth and day-to-day. In some cases the trainers had to sell some training materials to provide trainees with daily food to enable them to continue the training. Furthermore, personal protective equipment was not provided for construction trainees in the GC at Bo.

Effectiveness

Considering the challenging environment in which project activities took place, the project was assessed overall as **effective**. The project was partially achieved its aim to renovate and enhance the infrastructure of some of GCs (Output 1), especially at Bo, and equipped them with required machines enabling them to expand their production capacities. Moreover, three solar PV systems were delivered to a high quality (Output 2), but technical operation and maintenance issues need to be properly explained to GC managers. Improvements to GC management (Output 3) were partially achieved through 'learning by doing', as was skills training for the youth (Output 4).

The **outcomes** of the project, including 'enhancing the quality of commercial agribusiness operations of the GCs', as well as 'improving the capacities of the unemployed youth of the targeted communities in agro-processing activities, entrepreneurship, computer literacy and internet communication' could be partially verified through interviews, surveys and reports.

Sustainability

The evaluation team found some evidence for project **sustainability**. This included provision of high quality solar PV systems to the Growth Centres, which along with much of Sierra Leone's rural communities are off the national electricity grid. Building the GCs' human resource capacity through the ToTs and management skills workshops are also considered as crucial to project sustainability. Furthermore, valuable linkages between the Growth Centres and other NGOs have been established. However, some serious challenges, including the unclear legal status of the GCs, the underdeveloped trade capacity of the Growth Centres, as well as the lack of solid business plans are amongst the major concerns for the sustainability of the achieved outcomes. Last but not least, use of charcoal in food processing threatens the environmental

sustainability of the project, which remained unchanged despite the provision of environmentally friendly energy.

Nearly half of trainee respondents stated doing some form of business while still being in training. Particularly, trainees of carpentry, masonry, food processing, tailoring and gara tie-dyeing are already making some cash from the skills they have acquired. In some cases, such as in Bo, the carpentry trainees receive part of what their trainer awards/earns from contracts. However, trainings had a limited area of outreach and benefitted fewer women as compared to men.

Impact

The long-term **impact** of the project, including 'improving the resilience of targeted communities to shocks through improved skills of the youth in entrepreneurship, leadership and management' would require an ex-post evaluation. In terms of impact on 'the diversification of income, including from non-farm sources', the evaluation team observed that this aim has already been achieved as some of the trainees had stated that they were earning more money after training than before.

Recommendations

The following recommendations are based upon findings of the final evaluation, which in parts resemble those of three earlier evaluations:

Recommendations to UNIDO with regard to the intervention in Sierra Leone

- Similar future projects should provide trainees with food or wages for the duration of the training in order to reduce the rate of dropouts among the poorest trainees.
- Personal protective equipment should be provided for all UNIDO trainees.
- In order to enhance project efficiency, communication and information sharing among the project implementation team and the management of the GCs should be enhanced, e.g. the project document and lists of equipment need to be made available to the counterparts at the national and local level.
- The project should have local coordinators based in the field to ensure active, transparent and effective communication with the national counterpart and local partners.
- For effective monitoring and evaluation of the project and to strengthen the coordination of activities, similar future projects should establish a steering committee.
- The Growth Centres should focus on operating as self-sustaining units with sound business plans and clarity on asset ownership in order to reduce their dependence on external funding.

- To enhance their relevance, similar future interventions must establish a partnership with the Ministry of Agriculture, Forestry and Food Security, as this Ministry is the major national authority in charge with developing initiatives such as the Agricultural Business Centres (ABCs).

Recommendations to UNIDO with regard to post-crisis interventions

- Feasibility studies, needs and risk assessments as well as a carefully designed LogFrame are crucial to the success of post-crisis interventions, and should be undertaken in the course of project formulation or its inception phase.
- In post-crisis contexts, and to the extent practicable, project staff should be awarded adequate salaries and a degree of contractual security in order to help motivate and stabilise the project team.
- In order to facilitate project efficiency, the PM in HQ should avoid micro-level management, and to make greater use of the Chief Technical Advisor (CTA) in the field in day-to-day affairs. Emphasis should be on providing the project office with an annual work plan, and asking them to develop quarterly work plans with associated monthly progress reports.
- UNIDO should further implement its decentralisation plan in operations at the country level by devolving much decision-making, budget authority and procurement process to the field, to improve efficiency and enable fast-track procedures that are required in post-crisis situations.

Lessons Learned

In the course of the independent final evaluation a number of lessons and relevant questions have emerged, which can be of interest for the future interventions of UNIDO in Sierra Leone as well as elsewhere in post-crisis situations. It needs to be debated, for example, whether 1-year, short-term funding suits medium-term livelihood creation activities (where UNIDO has its comparative advantage) targeting youth in remote and vulnerable communities that have witnessed conflict and crisis.

- Basing a short-term post-crisis project on pre-existing national institutions enhances overall project effectiveness.
- In insecure, post-conflict settings where many people live hand-to-mouth and day-to-day for their basic necessities, providing wages and/or food have to be a part of the reconstruction or training work, particularly for the most vulnerable beneficiaries.
- In general, decentralisation in decision-making process, budget authority, and procurement procedures to the field would improve efficiency and timely delivery, as fast-track procedures are essential for successful interventions in post-crisis situations.

1. Introduction and background

1.1 Introduction

An independent final evaluation has been conducted on the project “Rehabilitation of training-cum-production centres in vulnerable communities of Koindu, Kpandebu and Pujehun in Sierra Leone”. The overall objective of the project was to contribute to the efforts of the Government of Sierra Leone to improve the resilience of the targeted communities in the border areas of the country through improved entrepreneurial, leadership and management skills for youth, and enhanced capacities to undertake diversified income generating activities. In the course of implementation, two further project sites were added to the initial plan: a Growth Centre (GC) in Bo as well as a number of local enterprises in Kailahun in the eastern part of the country.

The project was funded through the Supplementary Budget of the Japanese Ministry of Foreign Affairs. This was part of an overall contribution of US\$ 9.8 million from the Government of Japan (GOJ) for the execution of seven projects under the title of “Response to humanitarian crisis in Africa”. A Note Verbale was issued from the Permanent Mission of Japan in Vienna on 8 December 2010. The project started on March 1st, 2011 with UNIDO as the executing agency while the counterpart was the Ministry of Trade and Industry.

The project, initially designed for a one year period with a budget of US\$2 million had to be extended twice (to June and then August 2012) and was completed by the end of August 2012.

1.2 Project background

UNIDO has a relatively long history of assistance in developing non-farm activities for rural populations of Sierra Leone. The establishment of the first GC dates back to 1980s, before the outbreak of civil war, when the established centers served local communities to process agricultural produce. In the aftermath of the war, the Growth Centres were used by other international organizations to conduct training and contribute to reintegration of ex-combatants. In recent years UNIDO has contributed to the Growth Centres through rehabilitation of destroyed structures, introduced solar photovoltaic (PV) systems and updated some of the processing equipment. It has also assisted the centres with legal and business advice, as their legal status is not yet clear.

The GCs are aiming to be part of a country-wide initiative called the Sierra Leone Agribusiness Initiative (SABI), which is an offspring of an agriculture-for business

project that was established 26 years ago in Songhai, Benin. Some representatives were supported by UNIDO on a fact-finding mission so that such a productive agricultural initiative practised in Benin would be replicated in Sierra Leone upon their return (see Box 1).

Agro-processing was already underway at the GCs due to a number of previous UNIDO projects. International Institute for Tropical Agriculture (IITA), Food and Agriculture Organization (FAO), World Food Programme (WFP), Welt Hunger Hilfe, Child Fund, and Finnish Refugee Council have been working with the Growth Centres to tackle the issue of food security by developing the agricultural value chain. However, since most GC operations can take 3 - 5 years to fully develop; only limited outcomes can be achieved in the 1.5 years of the latest funding.

The project under evaluation aimed to fortify community resilience to shocks by diversifying income-generating activities and making improvements in entrepreneurial, leadership and management skills in vulnerable communities. By expanding the capacities of GC, which were to act as training-cum-production centres, they could provide services for agro-entrepreneurship development for rural young men and women, and to develop commercially sustainable operations through the value-added processing of agricultural products. Key to this was the provision of reliable energy resources for the Growth Centres by installing solar PV energy systems.

BOX 1

Awoko - October 15 2012 BY POINDEXTER SAMA

The Sierra Leone Agribusiness Initiative (SABI); an agriculture-for-business oriented project past Thursday certified 24 trainees for the operation of agro machines in the 193 Agribusiness Centres. The project which is being implemented on a 500-acre of land at Newton in the Western Rural District of Freetown is established across the country by the Ministry of Agriculture, Forestry and Food Security (MAFFS). During the certification ceremony at the SABI Canteen which drew the attendance of dignitaries from the United Nations Development Programme, Food and Agriculture Organisation, MAFFS among others, it was revealed that training of personnel to operate the machines at ABCs has been a major factor apparently impeding the expected output of those centres.

Engineer Milford Rose who represented the Deputy Minister of Agriculture opined that the efforts in ensuring the productivity of agriculture will be very bleak without mechanisation. He said with such achievement made in the training of locals in the handling and repair of agricultural equipment, a great success is envisaged especially as the country braces itself up to meet the targets set by the UN in the Millennium Development Goals in the area of food security.

FAO Director, Gabriel Rugalema felicitated the Agriculture Ministry for the leadership and tenacity in bringing the project to reality. In strings of appreciation, he said "a trainings and projects of this nature are very necessary in post war countries", as they will contribute to economic growth, youth employment and capacity building. He assured that FAO is always ready to support moves that are geared towards improving agriculture for food security in the country.

Representing the United Nations Development Programme at the programme, Mohammed Abchir said that the Gross Domestic Product (GDP) of any country depends on the viability of agriculture, emphasising that "agriculture plays a pivotal role in developing an economy. It was for such reason he said, the UNDP spends about \$1 Million Dollars to promote the SABI Centre.

The project's overall aim was to expand improved functions and services of the Growth Centres to have a positive impact in changing the perceptions of the unemployed youth on staying in their local communities, and provide them with skills and know-how to engage in agri-business activities, thereby improving the resilience of local communities to external shocks.

The Growth Centres are planned to eventually serve as satellites of the Sierra Leone Agri-Businesses Initiative (SABI) in Newton, outside of Freetown, which is modelled after the Songhai Centre in Benin. Once SABI is operational, Newton will serve as a hub to disseminate agricultural and agro-processing technologies and extension services to the rural communities.

By offering training in food processing, the project adopted an integrated agro-processing value chain approach, except for Kailahun and in Koindo where the project's focus was on private sector development. In Kpandebu and Pujehun, UNIDO's work is complimented by the GCs' partnerships with the International Institute for Tropical Agriculture (IITA) and WFP. IITA has expertise in food processing and undertakes extensive cassava processing projects in Africa and not only supplies the GCs with cassava tuber, it also provides training to enhance the quality of the end product. This is a complementary activity to UNIDO's work and particularly important in Pujehun and Kpanedbu.

Figure 1 – Solar energy with generator back-up



In terms of the introduction of solar energy systems, this technology can contribute to rural electrification in Sierra Leone. Because the structure of the Sierra Leone electricity grid is based only on a few generating plants and with total capacity under 100 MW the country has one of the lowest levels of electricity in sub

Saharan Africa. In addition the distribution networks cannot support the full generation of the country's systems which is a serious impediment to economic growth, particularly in the industrial and service sectors. Furthermore, the country has some of the highest costs of electricity generation and delivery in the world at approximately US\$ 0.16/kWh and the economic performance of the national utility is severely impacted by this.

For the Growth Centres, even if they are located near a grid line, the service is unreliable, relying on stand-by generators (see Figure 2 and Figure 3), but for the food-processing and other operations, energy security is required. This can be provided by diesel or petrol generators but at US\$ 1 per litre of fuel, this is an expensive option. With the local daily solar radiation at 4.1 - 5.2 kWh/m², solar PV therefore offers an opportunity to energise post-harvest activities, support Business Information and Communication (BIC), and give a platform for AV equipment, mobile phone charging, refrigeration, and TV for leisure activities.

UNIDO's solar energy promotion at the Sierra Leone Growth Centres started under the Integrated Programme in 2008 with the provision of 5-panel, 1 kW capacity PV systems at all the visited centres (see for example Figure , Figure) and a 5 kW system in Binkolo. Being standard sizes, these projects were not based on an assessment of individual demand but served more as a demonstration of solar electrification. However they have been very beneficial, not only for lighting but for small AC power needs (computers, refrigeration, DSTV) earning some income from showing football matches (Le 400,000 or US\$ 100 per year) and selling cold drinks sales (Le 600,000 or US\$ 140 per year) to youths in the evenings.

Figure 2 - Existing 1 kW PV system in Bo



Figure 3: Existing 1 kW PV system in Pujehun



1.3 Identification and formulation

As the Project Document (PD) states, there are two main problems addressed by the project: Youth unemployment and low levels of income, especially from non-farm sources, which have been placing communities in conflict affected areas at risk from future shocks, be they natural or man-made. Providing adequate and reliable access to electricity through solar photovoltaic systems is considered key to building resilience⁶, particularly in a country where 95% of the population lacks access to reliable electricity supplies and is forced to use expensive fuel generators. The project focused on the rehabilitation and expansion of already existing training facilities, in Growth Centres (training-cum-production centres) and development of local productive capacities to diversify subsistent farming with non-farm agro-processing activities. Given the sensitivity of border areas to external factors, they have a particular need for building resilience; so the target areas were chosen as Koindu and Kailahun, close to the borders with Guinea and Liberia; and Bo, Pujehun and Kpandebu, located on the eastern side of the country towards Liberia (see Figure 5).

1.4 Conflict sensitivity

Based on the lessons learned from previous interventions in Sierra Leone, the project chose conflict-affected communities in the border areas of the country, with the exception of Bo, the country's second largest city. Two of the selected locations, Koindu and Kailahun are the origin of the civil war. In fact, both towns have been largely destroyed and have not been rebuilt in the decade after the war (see Figure 4). Pujehun and Kpandebu both are located in remote areas. Bo, on the other hand, hosts thousands of young unemployed migrants from other parts of the country, looking for education and/or employment opportunities.

Figure 4 - Much of Koindu still remains in ruin a decade after the war



⁶ http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2011/06/29/000158349_20110629104032/Rendered/PDF/WPS5713.pdf

Looking back at the origins of the conflict in Sierra Leone, there is a consensus that the lack of prospects for the youth and systematic marginalisation of the rural population from education and employment opportunities and hence their frustration were amongst the major factors in the civil strife that followed. The border region with Liberia and Guinea continues to experience tensions with porous borders and neighbouring rebel movements in close proximity although the conflict has ceased for more than a decade. For example, the Guinean army was deployed near Koindu during the evaluation mission period.

In recent years, the UN Secretary General has repeatedly referred to youth unemployment as one of the most acute concerns of the international community, and could threaten the gains that Sierra Leone has achieved in several years of peace.

**Figure 5 - Location of Growth Centres in the UNIDO project
(Kailahun also marked)**



Map No. 3902 Rev. 4 UNITED NATIONS
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Cartographic Section

1.5 Objectives

According to the project Logical Framework (see Annex 2) the overall development goal of the project was to bring about resilience in local communities in targeted areas by improving their entrepreneurial, leadership and management skills, and through this diversifying their sources of income. The intervention attempted to achieve these goals through a set of immediate objectives, including expanding the production volume and revenue of each Growth Centre (GC) by 10%, and having at least 60% of trainees complete their training and be certified within one year of the completion of the project.

1.6 Outputs

The project document lists 4 main outputs for the project (see Box) and the following main activities, which had the advantage of a relatively uncomplicated implementation with a manageable number of activities.

Output 1: The renovated Growth Centre premises have expanded agro-processing capacities, facilities for collective purchasing of inputs and for collective marketing of products, as well as capacities to run production/training programmes for the youth.

[Note: The premises of the Growth Centres in Kpandebu, Bo and Pujehun will have been rehabilitated, defects of equipment will have been repaired or replaced, and producing better quality of commercially competitive products with collective purchasing of inputs and collective sale.]

Output 2: Growth Centres have reliable access to low-cost, renewable energy for operations and for providing energy services to local communities (Bo, Pujehun and Kpandebu).

Output 3: Growth Centre managers and the members of respective Growth Centre Board have improved management capabilities for the commercial operations (Koindu, Kpandebu, Bo and Pujehun).

Output 4: Youth, men and women, have received training for improved skills in technical aspects of agro-processing operations and business skills for running commercial operations.

[Note: The incomplete training programme in Kailahun will be completed by the provision of missing training materials and the youth in Kailahun will acquire life-skills and receive certificates.]

Output 1. Growth Centre renovation

The main activities within Output 1 were as follows:

- 1) Architect to produce Bill of Quantities (BOQ) and renovation work plan for Kpandebu, Bo and Pujehun.
- 2) Purchase construction skills training materials based on the BOQs.
- 3) Recruit a Site Manager and construction trainers for Kpandebu, Bo and Pujehun.

- 4) Prepare blue prints for the renovation and expansion of already existing premises.
- 5) Recruit construction/training programme trainees from Kpandebu, Bo and Pujehun communities.
- 6) Conduct construction/training programme for the renovation of Growth Centres in Kpandebu, Bo and Pujehun, and issue training certificates to the trainees.
- 7) Prepare technical specifications on food processing equipment in consultation with Songhai Centre in Benin that is the centre of excellence in the region for agro-processing.
- 8) Obtain proforma invoices from Songhai Centre in Benin.

In addition to contributing to skills training during the renovation, UNIDO also provided equipment to the trainers in this phase, such as training materials and equipment for the various income-generating activities, sewing machines, electrical appliances, cutting tables, and machinery such as welding machines and air compressors (a full list can be seen in Annex 8). The Growth Centres also received office equipment and computers from UNIDO to support their Business Information Centre (BIC) activities.

Output 2. Reliable energy supply for GCs

The main activities within Output 2 were as follows:

- 1) Prepare technical specifications for the photovoltaic energy system.
- 2) Purchase the equipment.
- 3) Install the equipment.
- 4) Conduct training in use and maintenance of the system.

In all of the GCs there has been previous experience with renewable energy with small-scale PV systems in place for the past two years (see Figure 6) which have enabled the operation of a refrigerator (to cool water and drinks and sell them to the community), a TV (used by the community and in particular youth to watch football) and computers (to train youth in computer skills). However, the GCs at Pujehun and Kpandebu also have a generator to have greater power for blacksmithing and processing activities and Koindu have a mobile generator set for use of some of the livelihood activities there.

Figure 6 - Small PV system (1 kW with batteries) in Koindu, also at Bo, Pujehun and Kpandebu



The new solar PV plan was a key output in the PD wherein the Growth Centres would have reliable access to low cost renewable energy for operations and for distribution to the local community.

Output 3. Capacity building of GCs human resources

The main activities within Output 3 were as follows:

- 1) The legal status of the Centre is clarified in conjunction with the managers and Board.
- 2) Managers receive training and assistance in marketing expertise.
- 3) Managers receive training and assistance in entrepreneurship training.
- 4) GC managers learn-by-doing in leading training programmes of youth in agro-processing.
- 5) GC managers are trained in use and maintenance of the PV solar system.

Output 4. Youth have received training

The main activities within Output 4 were as follows:

- 1) Develop selection criteria for trainees, with proactive approach to attracting women trainees.
- 2) Develop syllabus/training modules, including specific modules tailored for women trainees.
- 3) Conduct technical and business training.

Trainings were offered in the following areas at all GCs: auto-mechanics, carpentry, food processing, embroidery, gara tie-dyeing, hairdressing, masonry, metalworking, soap-making, tailoring and weaving. Trainings in agriculture, gardening and computer skills have been also offered.

1.7 Budget

Table 1 gives a breakdown of the budget planned for the intervention.

Table 1 - Summary of Sierra Leone growth Centre Budget

| BL | Description | w/m | unit cost | US\$ |
|-------------|---|------------|------------------|------------------|
| 11-51 | International photovoltaic solar energy consultant | 3 | 15000 | 45,000 |
| 11-52 to 54 | Other consultants (entrepreneurship, professional assistant) | | | 153,000 |
| 13 | Administrative assistant & drivers | | | 36,000 |
| 13-50 | Construction technicians and short term administrative assistants | 180 | 800 | 144,000 |
| 15 & 16 | UNIDO travel | | | 44,000 |
| 17-01 to 04 | National UNIDO staff | | | 101,000 |
| 17-05 & 06 | Lawyer and architect | | | 34,500 |
| 17-07 | Construction site manager | 11 | 3500 | 38,500 |
| 17-08 | Management and accounting specialists for each site | 33 | 9,000 | 99,000 |
| 17-11 & 50 | National consultants | | | 37,500 |
| 33-00 | In-service training including construction training materials | | | 304,000 |
| 45-00 | Equipment (food processing equipment, sewing machine, block-making equipment, PCs, photovoltaic solar energy systems, copier, scanner) | | | 628,700 |
| 51-00 | Miscellaneous (operation and maintenance of vehicle and other equipment, office utilities, document reproduction, public relations materials, consumable office supplies, sundries) | | | 58,412 |
| 82-00 | Evaluation | | | 46,300 |
| | UNIDO support costs | | 13% | 230,088 |
| | TOTAL | | | 2,000,000 |

The solar component costs were managed separately by the UNIDO Rural and Renewable Energy Unit with a PAD of US\$ 602,500 (BL 45, covering equipment, consultancy and staff costs). In summary the estimated capital costs (from TERI's technical documents not including civil works, electrical installations, delivery, customs, travel and margins) were as follows:

| | | |
|--------------|----------------------------------|----------------------------|
| Bo | capacity planned = 20 kWp | Cost = US\$ 180,124 |
| Pujehun | capacity planned = 16 kWp | Cost = US\$ 156,960 |
| Kpandebu | capacity planned = 16 kWp | Cost = US\$ 156,960 |
| Total | Capacity planned = 52 kWp | Cost = US\$ 494,044 |

A further budgeted amount of US\$ 108,456 for the solar PV support costs therefore looked reasonable at project design stage and left about US\$ 135,000 under Budget line 45 for other equipment needs.

1.8 Inception Phase

At the outset of the project, the project manager identified GCs in Kpandebu, Pujehun and Koindu and chose a number of local enterprises in Kailahun to serve as project sites. The projects were designed to build upon previous UNIDO interventions in Sierra Leone and the managers of the GCs were approached by UNIDO and were informed about the new intervention. The Bo GC was added to the project at a later stage, because, being located in the heart of the country, the city is hosting thousands of young unemployed migrants.

The project team consulted the managers of GCs on the disciplines that were to be taught. 10 -12 trainers from each GC and 12 local entrepreneurs from Kailahun were selected by the project team to be sent to Guinea to take part in the Training of Trainers (ToT). After the completion of the ToT, the trainers were consulted about the required training materials; in addition, a rapid assessment of the required equipment and necessary infrastructure updates was conducted.

A number of meetings with respective stakeholders took place, including the board of GCs and managers. The Njala University, the country's second biggest university, had been approached to initiate an entrepreneurship curriculum and be involved in a management workshop that UNIDO facilitated to enhance capacities of management and board members of the GCs.

The new solar PV plan was a key output in the PD wherein the Growth Centres would have reliable access to low cost renewable energy for operations and for distribution to the local community. Within UNIDO, the solar projects were managed by the Renewable and Rural Energy (RRE) Unit and not under the main project, resulting in plans based on a feasibility study (July 2011) and Technical Project Documents (Nov 2011) made by The Energy and Resources Institute (TERI) of India, then the specifications drawn up by the contractor, Sunlabob of Laos (Feb 2012).

1.9 Review of previous evaluations

There have been three previous evaluations of relevance to the project currently under evaluation, as outlined below.

a) Evaluation of Sierra Leone Integrated Programme (2008)

UNIDO's Integrated Programme (IP) in Sierra Leone (entitled 'Post-conflict SME support programme for industrial development and poverty alleviation') was implemented between 2004 and 2008. The IP was evaluated in February-March 2008, and the report published by the UNIDO Evaluation Unit in October 2008.

b) Thematic Evaluation of UNIDO Post-crisis Projects (2010)

In 2003, the UNIDO General Conference decided that UNIDO should undertake more industrial rehabilitation and reconstruction initiatives in post-crisis situations. In 2010, UNIDO published a Thematic Evaluation of 10 post-crisis projects, including in Sierra Leone.

c) Independent Evaluation of the Mano River Union Project (2010)

UNIDO co-implemented the 'Multi-stakeholder Programme for Productive and Decent Work for Youth in the Mano River Union (MRU)' over the period 2008 to 2010. The MRU countries are Sierra Leone, Liberia, Guinea and Ivory Coast and the participating agencies were the International Labour Organisation (ILO) and the Youth Employment Network (YEN).

What follows is a brief overview of the main findings and conclusions of the above evaluations, as relates to Sierra Leone.

1.9.1 Project Design

Market surveys and training needs assessments were not included in the project formulation phase. It was questioned whether short-term funding suits medium-term income creation activities (where UNIDO has its comparative advantage).

Donor priorities, rules and conditions (e.g. short project durations) are shaping poor project design, e.g. planning missions, originally not sufficiently funded to identify the best interventions, then pushed into the inception phase that further reduces project implementation.

1.9.2 Relevance

Selection of the MRU border areas was highly relevant due to the high unemployment and underemployment there. A combination of facility rehabilitation and training was found to be relevant to post-crisis settings. UNIDO has a comparative advantage in post-conflict situations due to its focus on industrial development and adding value to agricultural products.

1.9.3 Efficiency

With regard to the content of training, there was no evidence that these were designed with reference to market needs surveys and future trends. Construction work absorbs substantial project management efforts and often results in delays and project extensions. All the interventions had extensions in order to complete the original aims due to complexities of the interventions in the remote and post-conflict areas. Efficiency was impacted by the centralised UNIDO project management and tendering systems, resulting in delays, especially in the procurement of equipment. In the case of the MRU, administrative practices of the ILO, UNIDO and YEN negatively affected efficient delivery and led to delays. Hiring of project staff was not co-ordinated, delayed and with short contract offers. With regard to project monitoring, this focused merely on project outputs, with less attention paid to outcome and impact monitoring.

1.9.4 Effectiveness

Generally, results on effectiveness of institutional rehabilitation and capacity development were mixed. According to the Thematic Evaluation of Post-crisis Projects (2010), reconstruction in all projects took longer than expected. In several cases institutions were not yet fully operational at the end of the project, which made it difficult to assess the effectiveness of both the rehabilitation measures and the wider institutional capacity development.

There were doubts about whether the Growth Centre model could be expanded, since their economic and employment benefits were uncertain, e.g. the food processors needed to access to credit.

It is good practice to integrate entrepreneurship training with technical skills training but expertise and adequate training materials need to be provided.

1.9.5 Sustainability

No Memorandum of Understanding (MoU) was drawn up between the project partners in Sierra Leone to clarify their responsibilities. Moreover, ownership of land and facilities as well as the legal status of Growth Centres has not been cleared. Hence, their technical and financial sustainability was found to be uncertain. Growth Centres were also dependent on outside funding for their operation and therefore not operating as self-sustaining and profitable units. Finally, there was little evidence of business plans for the Growth Centres.

Several UNIDO interventions in post-crisis settings were limited to infrastructure rehabilitation, and there was not enough room for capacity development. Short period of implementation meant also that not all activities had the potential to be technically or financially sustainable.

With regard to giving away start-up kits, which is common practice in post-crisis projects, some reports argued that it can counter the drive towards developing a self-reliant and entrepreneurial culture.

1.9.6 Recommendations

- UNIDO's approach to projects in post-conflict areas needs to be reviewed after the latest (2010) evaluation and whether the Growth Centre concept is the correct one to promote rural employment in a post-conflict situation.
- For the early stages of projects, more resources should be given to sound project planning and fact-finding and proper LogFrame and monitoring techniques.
- Feasibility studies, needs and risk assessments should be included in the project formulation phase, and Steering Committees should be set up.
- It should be recognised that Growth Centres face particular sustainability challenges and UNIDO should conduct ex-post evaluations so that the outcomes and impacts can be fed back to the government for scaling up the Growth Centre plan.
- There should be recognition that skills training in cases of high illiteracy levels needs to be combined with non-formal basic education.
- In line with its decentralization priorities mentioned in the "UNIDO Strategic Long-Term Vision", UNIDO should strongly pursue decentralisation in decision-making process, budget authority, and procurement procedures to the field to improve efficiency and timely delivery as fast-track procedures are required in post-crisis situations.

1.9.7 Lessons learned

The Growth Centres need to focus on operating as self-sustaining units with sound business plans and clarity on asset ownership, and not dependent continually on outside funding, that although is well meaning is often poorly aimed and delivered.

1.9.8 Conclusion

It is notable that the current Growth Centre project in Sierra Leone only picked up on a few recommendations from earlier evaluations, for example on the importance of food-processing training and design of training. Several issues in the project design and formulation, procurement of input materials and monitoring & evaluation still remain.

Feedback from UNIDO staff indicated that they rarely properly read the independent evaluations because of their pressures on delivering the next projects.

2. Evaluation purpose, scope and methodology

2.1 Evaluation background

The Programme Approval and Monitoring Committee (AMC) decision of 10 December mandated an independent final evaluation of the projects in 7 countries receiving Japanese contributions for post-crisis interventions. The main objectives of the final evaluations were to contribute both to future UNIDO cooperation with the Government of Sierra Leone and UNIDO's institutional learning in short-term, post-crisis interventions. The evaluation field mission took place in July and August 2012 and the main findings are outlined below.

The evaluation mission was conducted in the closing weeks of project implementation, between 25th July and 3rd August 2012 by independent evaluation consultants Simon Taylor, team leader and renewable energy specialist, Leila Salehi Ravesh, livelihood specialist, and John Lahai, national evaluation specialist.

Due to strong time constraints for the exercise, the evaluators concentrated on the core issues of interest, and were assisted by proactive support from the project management team, UNIDO HQ and Field Office, and the Evaluation Group in HQ. This helped to identify key substantive issues in a participative manner with the evaluators using a mix of document reviews, interviews, field visits and local surveys. The approach included a high degree of engagement at the field level with a close eye on the post-crisis factors and took into account recommendations of previous evaluations.

2.2 Evaluation purpose and scope

The objectives, purpose and scope of the evaluation were to a great extent determined by the UNIDO Evaluation Group. The main objectives were to identify the lessons learnt in Sierra Leone and contribute to a) future UNIDO cooperation with the Government of Sierra Leone, b) future UNIDO cooperation with the Government of Japan and c) UNIDO's institutional learning in short-term, post-crisis interventions with a forward looking approach. The latter would be part of a wider thematic evaluation of a series of UNIDO post-crisis interventions mainly in African countries.

The thematic evaluation will help UNIDO shape its overall strategy in post-crisis settings, and further identify UNIDO's specific role and added value in supporting

crisis-affected countries make the transition from humanitarian assistance to early recovery, reconstruction, and sustainable development.

This report will therefore be of interest to concerned UNIDO staff at HQ and the field, as well as Sierra Leonean and Japanese counterparts. The stakeholders were consulted in Vienna and in the field as part of the evaluation exercise, and their comments and feedback were sought as part of the report finalization process.

2.3 Evaluation methodology

The final evaluation was carried out in keeping with agreed evaluation standards and requirements, fully respecting the principles laid down in the “UN Norms and Standards for Evaluation” and Evaluation Policies of UNIDO.⁷ The evaluation was conducted in the context of a post-conflict setting following Sierra Leone’s civil upheaval between 1991 and 2002.

The evaluation team collected data from the beneficiaries in the field and assessed the information gathered through interviews and focussed group discussions with beneficiaries as well as the quantitative survey from trainees. While maintaining independence, the evaluation team followed a participatory approach, which seeks the views and assessments of all stakeholders assessing the main issues of project with regard to:

- The process of project identification and formulation;
- The relevance of the implemented project for Sierra Leone on its path from recovery to development;
- The efficiency and effectiveness of project implementation of the project;
- Project coordination and management and ownership by stakeholders;
- Achievement of its intended results and their sustainability;
- The cross-cutting issues such as gender, environment and South-South cooperation.

The evaluation team took account of various primary and secondary sources of information, including desk analysis, survey data, and interviews with different counterparts donor representatives, programme managers and through the cross-validation of data. The evaluation consultants visited UNIDO ‘Field Office in Freetown and all of the project sites to interview various stakeholders including direct beneficiaries in the field.

The evaluation assessed the results chain, focussing specifically on outputs and planned outcomes, and also the likelihood of achieving planned outcomes despite the limited timeframe of the project. Full account has been taken of previous evaluations including UNIDO’s post-crisis interventions. By analyzing the implementation of these recommendations, suggestions have been made on

⁷ All documents available from the websites of the UN Evaluation Group: <http://www.uneval.org/>

factual findings and emerging lessons from the Sierra Leone experience. Finally, the evaluation considered recommendations for future interventions - see Annex 1 for the TOR.

i. Document Review

An extensive desktop review of the project documents provided by the project team at the HQ and the field office was undertaken. These included the project document “Rehabilitation of training-cum-production centres in vulnerable communities of Koindu, Kpandebu and Pujehun in Sierra Leone” as well as the “*Feasibility Study for Solar Power Plants in Sierra Leone and Liberia*”. In addition, the evaluation team collected and reviewed a number of monthly, annual and progress reports from the UNIDO field office and the Growth Centres.

Furthermore, the team took account of the official agreement documents between UNIDO as well as the national and local authorities in Sierra Leone, such as the “Joint Vision for Sierra Leone of the United Nations Family”, which contains the concept of this intervention and was produced by the Government of Sierra Leone and the United Nations Integrated Peace building Office in Sierra Leone (UNIPSIL) in September 2009.

ii. Interviews with different stakeholders

The evaluation team conducted interviews with the different stakeholders of the project, including representatives of the Government of Japan in Vienna, UNIDO staff in HQ and the field, representatives of the government of Sierra Leone in Freetown and the local authorities. Further, interviews have been conducted with a broad range of beneficiaries, including the management of Growth Centres as well as their human resources and in particular the trainees. A complete list of people met and interviewees can be found in Annex 3.

iii. Selection of beneficiaries for data collection

To collect feedback from direct and indirect beneficiaries of the intervention, the evaluation team gathered data from project beneficiaries who were met at the Growth Centres in Bo, Pujehun, Kpandebu and Koindu, as well as local enterprises in Kailahun. Focusing on all beneficiaries who were available and who had been involved in different activities of the project, the team used questionnaires and qualitative group discussions to reach as many beneficiaries as possible within the limited timeframe given.

The national evaluation consultant conducted a survey during a follow-up visit to the project sites. A sampling method was developed and 2 trainees (one male, one female) from each discipline were selected and were given questionnaires. A total of 53 respondents consisting of approximately 40% women were interviewed as indicated in Table 2 below.

Table 2 - Number of respondents by gender and location

| Number of Respondents' by Location | Gender | | |
|---|---------------|-------------|--------------|
| | Female | Male | Total |
| Bo Growth Centre | 6 | 10 | 16 |
| Pujehun Growth Centre | 6 | 6 | 12 |
| Pandembu Growth Centre | 4 | 10 | 14 |
| Kailahun Training Outlets | 5 | 6 | 11 |
| Totals | 21 | 32 | 53 |

Approximately 55 percent of the interviewees were youth within the 18-25-age bracket. Only two of them were younger than 18 years. The oldest respondent was a 43 year-old trainee at the Pujehun Growth Centre.

iv. Questionnaires

The questionnaires (see Annex 5) covered the process of beneficiary selection, quality of inputs, including training and training materials, the results of the training and whether it had achieved its intended objective and resulted in employment and income opportunities.

The qualitative and quantitative questions covered the following topics:

- The history of education and employment;
- Whether training had been received;
- The quality of inputs, including training;
- Whether the training has enabled them to create their own business or gain employment; and
- The likelihood of achievement of the expected outcomes and outputs.

v. Focus Group Discussions

To gather information from the trainers and management and board of the Growth Centres, the evaluation team arranged focus group discussions to discuss effectiveness, efficiency, sustainability and ownership of projects.

- At the Bo Growth Centre, respondents were divided into three groups and group discussions facilitated by one of the three evaluation consultants. The lead consultant facilitated discussions with Growth Centre Management team including the Centre Manager, construction manager and a number of board members. The National Consultant held discussions with graduate trainees from the centre, while the international consultant facilitated discussions with the trainers.

- At the Pujehun Growth centre, small meetings were convened, firstly between the national consultant and livelihood specialist and a group of agro-processors (including trainees) and secondly between the team leader and centre manager and representative of the Paramount Chief. An informal meeting was also held with the solar PV contractor who was on site at the time.
- Discussions in Kpandebu began with a formal and organised meeting with 60 members of the community including Paramount Chief⁸, traditional leaders and other community elders who are the custodians of the centre and its facilities. Following the meeting, the lead consultant engaged with trainers of some of the ongoing training components and checked on the solar PV installation, while the other two consultants held discussion with some trainees.
- In Koindu the team was introduced to a number of venues for livelihood trainings including soap making, gara tie-dying, tailoring, blacksmithing, weaving and auto mechanics, and the team leader also interviewed the centre management staff.
- Kailahun had a different set up as there is no centralised training centre. Trainees are trained at existing production outlets owned by individuals. The team visited seven of these workshops and held discussions with both trainers and trainees. Records were reviewed to determine the practice of entrepreneurial skills especially the maintenance of cash books.

⁸ Paramount Chiefs are nonpartisan [Members of Parliament](#) in Sierra Leone. There are 11 District Chiefs representing every district besides the [Freetown](#) Districts. The chiefs remained effectively the only institution of local government until the World Bank sponsored creation of a system of local councils in 2004. Under the system, chiefs are elected for life by a Tribal Authority made up of local notables. Only individuals from the designated "ruling families" of a chieftaincy, the aristocracy created and given exclusive right to rule by the British at the initiation of the system in 1896, are eligible to become Paramount Chiefs. (<http://people.fas.harvard.edu/~treed/history.pdf>)

3.

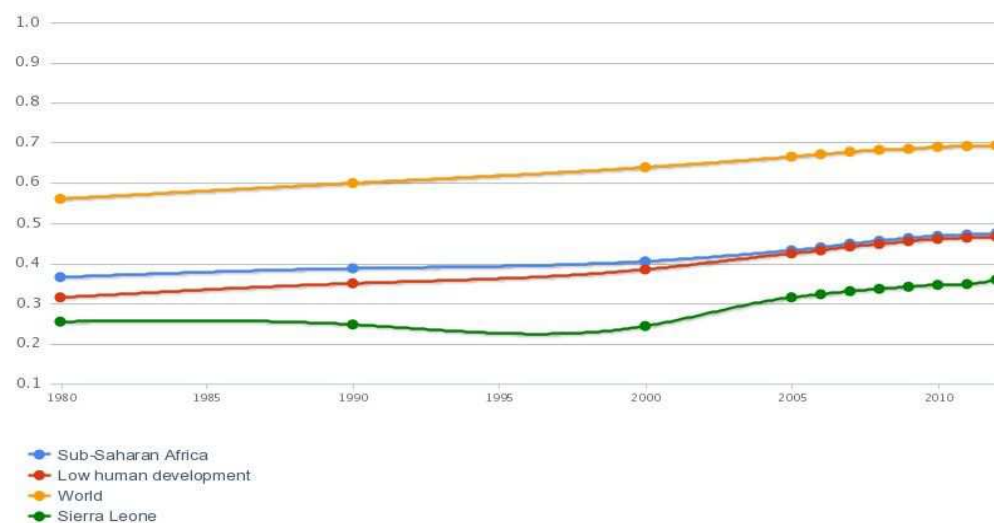
Country context

3.1 Country background and priorities

Sierra Leone is recovering from a brutal armed conflict that started in the small city of Kailahun in western part of the country in March 1991, and subsequently spread to the rest of the country, ending over a decade later in 2002 just after rebel groups were pushed out of Freetown and eventually defeated by international forces.

The country ranked bottom of the Human Development Index amongst 179 countries in 2007 and 2008.⁹ With the help of the United Nations Mission in Sierra Leone and thanks to slowly re-established security and stability (see the following Figure).

Figure 7 - Trends in Sierra Leone's HDI component indices 1980 - 2011¹⁰



According to the Global Hunger Index (GHI) 2012, Sierra Leone has an “alarming” level of hunger scoring 24.7¹¹ with 45% of households being food insecure, of which 6.5% are considered very insecure.¹² With around 70% of the population struggling with poverty, food insecurity and child malnutrition are prevalent. According to UNICEF, more than a third of children under five in Sierra

⁹ <http://www.irinnews.org/Report/82018/SIERRA-LEONE-Still-last-on-human-development-index>

¹⁰ <http://hdrstats.undp.org/images/explanations/SLE.pdf>

¹¹ <http://www.ifpri.org/publication/2012-global-hunger-index-country-case-study-sierra-leone>

¹² <http://www.wfp.org/countries/sierra-leone/food-security> (2011 Comprehensive Food Security Vulnerability Analysis (CFSVA))

Leone are chronically malnourished.¹³ In 2010, Sierra Leone had the world's 3rd highest maternal mortality rate (one in eight women risked dying during pregnancy or childbirth).¹⁴

Sierra Leone has already implemented two consecutive Poverty Reduction Strategies (PRS). The Second Poverty Reduction Strategy (PRSP II) 'Agenda for Change' indicates three relevant priorities as following (see Box 2):

- Reliable power supplies (including development of new sources of energy, e.g. solar);
- Raising quantity and value-added productivity in agriculture (in particular among the rural poor smallholders, who constitute the poorest segment of society);
- Sustainable human development through education and training (calling on International Community to assist).

BOX 2

The Agenda for Change focuses on four key priorities:

First, we must provide a reliable power supply to the country. This will be done through improving the management and regulation of the energy sector, strengthening revenue collection and increasing generating capacity. Provision of reliable power supply will be made possible by completing the Bumbuna Hydroelectric Project, including the connection of selected provincial towns to the power lines from Bumbuna and enhancing our transmission and distribution networks. We will also embark on the development of new sources of power throughout the country, including the competitive sourcing of private sector investment.

Second, from a pro-poor growth perspective, raising quantity and value-added productivity in agriculture and fisheries is critical to poverty reduction as the majority of Sierra Leoneans are engaged in agricultural and fishing activities. We have identified the development of agribusiness as strategic because of the possibilities it represents for food security, revenue generation and wealth creation.

Third, we will develop a national transportation network to enable the movement of goods and people and thereby facilitate increased investment and economic activity. Improving road, river and air transport will be a priority for the next few years. We will develop and implement projects that focus on the rehabilitation of 2,055 Kilometres of feeder roads and of 160 Kilometres of roads in major provincial towns. This will be coordinated to ensure that the agriculturally productive regions have the feeder roads that will enable our farmers to market their produce in a timely manner and increase their income through significant reduction in post harvest losses. To facilitate the movement of people, goods and services, we will rehabilitate and construct highways between the major urban centres in Sierra Leone as well as highways between Sierra Leone and neighbouring countries.

Fourth, in order to maintain the progress we will make, we must ensure sustainable human development through the provision of improved social services. Effective delivery of basic social services is essential for ensuring economic growth and poverty reduction. We are committed to bringing the service delivery closer to the people, by pushing forward our policy of decentralization and devolution of service delivery functions to local councils.

¹³ http://www.unicef.org/infobycountry/sierraleone_40058.html

¹⁴ 5th report of the Secretary General on the UN Integrated Peace building Office in Sierra Leone, 17 September 2010

Being the major source of employment and livelihood for 60% of Sierra Leoneans, agriculture constitutes the country's economic backbone. However, as a result of inadequate investment, lack of coordination, poor access to chemical fertilisers, herbicides, insecticides or motorised farm equipment, the sector's current share of GDP stands at about 46% and accounts for only 25% of export earnings. In contrast to the decades before the war, the country is not self-sustaining in food and is forced to import around one third of its rice, the country's main staple. External price shocks have had severe impact on the prices of imported foods, particularly rice. In Pujehun, for example, the average food price rose by double-digit percentages between 2011 and 2012.

At the national level, there is a pressing problem with food security in Sierra Leone. According to GHI, the country scores 24.7, which places it amongst countries with alarming hunger problem. Although 50 - 60% of the population is dependent on farming for its livelihood, the huge rates of soil depletion as well as the underdeveloped agro-processing capacities results in Sierra Leone importing around 30% of its requirements, mainly rice.¹⁵

In response to this the Ministry of Agriculture, Forestry and Food Security (MAFFS) has programmes on agro-processing called ABC (Agricultural Business Centres) which includes all the UNIDO training initiatives (see Box 3). International agencies such as International Institute for Tropical Agriculture (IITA), Food and Agriculture Organisation (FAO), World Food Programme (WFP) and Welt Hunger Hilfe were found to be actively engaged to find a solution to the problem of food security.

BOX 3

Concord Times (Freetown) - 21 September 2012 BY HASSAN BRUZ

A five-day training organized by Caritas Makeni and jointly funded by FAO and the Ministry of Agriculture for Agricultural Business Centres (ABC) board members has ended at the conference hall of the Department of Agriculture in Port Loko. The training attracted over 40 participants drawn from Rothun Makabisa Malaykuray and Port Loko town.

The session ended with an appeal to participants for the acquired knowledge to be shared with other members of the various ABCs in their respective localities. As outlined by the Director of Caritas Makeni, Joe Turay, the purpose was to build up the capacity of ABC and FBO board members in order to enable them plan the activities of their centers and to also manage their resources well.

Representatives from the University of Makeni and Northern Polytechnic respectively - who served as resource persons - said such training programmes will help farmers to develop an idea on how to market their produce. The Director of Agriculture in Port Loko District, Philip Conteh in his contribution commended FAO for its untiring financial support and praised Caritas for doing what the Agriculture Ministry should have been doing. He said such interventions are a step in the right direction as it will enhance the economy of farmers from subsistence farming to cash and eventual mechanized system of farming, which he said the country is longing for.

According to the programme support officer of Caritas Makeni, Michael Kamara, the organisation is also supporting hairdressing salons, tailoring, carpentry, and metal or blacksmithing with funds from Irish Aid.

¹⁵ GHI 2012

Foreign investment in agriculture (and mining) is needed to tackle two significant challenges, namely high youth unemployment rates and the living standards of 6 million Sierra Leoneans. Since 2008, the government has increasingly invested in agricultural development with the National Sustainable Agriculture Development Plan (NSADP) under the framework of the PRSPII “Agenda for Change”. This envisages making agriculture the engine for socio-economic growth and development through commercial agriculture and promotion of the private sector/farmer-based organizations (FBOs).

Rebuilding infrastructure is another priority for Sierra Leone. A report published by the World Bank in 2011 highlights electrification as a top priority for the country in the coming years, as only 5% of the population, exclusively in the urban areas, has access to electricity. Even in the major cities there has been erratic power supply and the use of generators to produce electricity is inefficient and has caused exceptionally high electricity prices. The EU and World Bank have contributed to different projects to enhance the capacity of Bumbuna hydroelectric dam in the northern part of the country. However, an underdeveloped distribution network is impeding the Government’s efforts to secure a stable power supply.¹⁶

Despite many challenges, Sierra Leone is relatively rich in natural resources. The country is amongst the top ten diamond producers, is a major producer of gold, possesses one of the world’s largest iron ore deposits in the world, and has significant titanium and bauxite deposits. The government has also recently signed agreements with foreign companies to explore the country’s waters for gas and oil and in 2012 the economy had an impressive 25% growth rate.¹⁷

Conflict over resources was a key driver behind the civil war, which was fuelled by marginalized, disadvantaged young people who lacked opportunities to participate in the country’s political and economic activities. It took the lives of more than 50,000 Sierra Leoneans and forced another 2 million to flee their homes and the country. It caused capital and physical destruction and wiped out the institutional memory of the country.¹⁸

The country’s young people have emerged from the previous decade as children carrying the scars of civil war, particularly because the Revolutionary United Front (RUF) used children to perpetrate atrocities on the population, fuelled by illicitly mined diamonds and other minerals and the backing of Charles Taylor’s NPFL in neighbouring Liberia. Many of these scarred individuals are now young people struggling in the search for employment in a country where there are limited opportunities especially in the eastern rural areas.

¹⁶ http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2011/06/29/000158349_20110629104032/Rendered/PDF/WPS5713.pdf

¹⁷ <http://www.africareview.com/Special-Reports/Africa-urged-to-spend-money-wisely/-/979182/1525828/-/t5rhfhz/-/index.html>

¹⁸ <http://www.unhcr.org/refworld/publisher,IRIN,,SLE,49af98781e,0.html>

Given the context, youth employment has been considered a high priority for the country and its post-crisis transition to development. In 2006, the UN Peace Building Commission selected Sierra Leone to receive its Peace Building fund, identifying youth employment as a priority issue for peace consolidation.¹⁹

In January 2009, the UN Secretary-General reported to the UN Security Council on the United Nations Integrated Peace Building Office in Sierra Leone (UNIPSIL) referring to youth unemployment as one of the most acute concerns that could threaten the gains that the country has made in several years of peace: "*Urgent action is therefore required to create employment opportunities with a view to reducing the lingering effects of the marginalization of the country's young people, who constitute the largest segment of the population.*"²⁰

To address these concerns, a number of UN initiatives, such as the "joint response to youth employment in Sierra Leone" have been created. The government has also made significant efforts to support its young population through establishing a number of initiatives to promote employment, such as the Youth Agricultural Farm Scheme.²¹ However, due to insufficient funding, several projects have not been fully implemented.²²

President Ernest Bai Koroma, who was re-elected for a second term on November 17th 2012, has been enforcing the implementation of the MDGs, particularly the ones addressing the health sector.

In consultation with the IMF, Sierra Leone has been developing a set of reforms linked to its Extended Credit Facility (ECF).²³ The recent ECF reform plan includes improvements in domestic revenue collection, efficiency of public expenditure and investment execution, transparency in public procurement, strengthening the fight against corruption and ensuring the financial viability of public utilities. A recent report of the Executive Board of the IMF states that "*Economic growth has been robust and broad-based, reflecting the scaling-up of infrastructure investment and the implementation of projects in mineral sectors.*" However, "*External price shocks and a loose monetary policy stance have kept inflation in the double digits.*"²⁴

UNIDO has been supporting Growth Centre initiatives in Sierra Leone since 1986. Since then, the Centres involved in this project have been through several phases, including initial rehabilitation after the war, then expansion into food processing and metal-works, and more recently, training for the management of the Centres. Therefore this phase of UNIDO's assistance was not evaluated in isolation and it was recognised that the GCs have evolved through several phases.

¹⁹ <http://www.unhcr.org/refworld/publisher,IRIN,,SLE,49af98781e,0.html>

²⁰ <http://www.unhcr.org/refworld/publisher,IRIN,,SLE,49af98781e,0.html>

²¹ Global Agriculture and Food Security Programme: A Proposal from Sierra Leone for supplementary funding for its National Agricultural Investment Plan, June 2010

²² http://www.un.org/en/peacebuilding/cscs/sl/key_docs/sl_joint_response.pdf

²³ <http://www.un.org/special-rep/ohrls/ldc/HDI-LDC2002.pdf>

²⁴ <http://allafrica.com/stories/201209181256.html>

4. Assessment

4.1 Project design and intervention logic

UNIDO confirmed that the Project Document (PD) was prepared rapidly after the confirmation by the GOJ that funds would be made available under the framework of “Response to humanitarian crises in Africa”. Consequently, the PD and its LogFrame are not fully developed and this makes the project difficult to evaluate systematically. Additionally the monitoring and evaluation requirements are not specified in the project document, which further impedes evaluability.

However, the PM’s familiarity with the management of the Growth Centres and the context helped to apply a participatory approach in project identification. While establishing VTCs draws from the previous evaluation recommendations under the Integrated Programme, selecting the target group (unemployed young men and women in border areas) was one of the lessons learned from the Mano River project.

The LogFrame’s overall objective and outcomes were generally not supported by SMART²⁵ indicators, which made the evaluation of the project a challenging task. Some indicators were non-specific and therefore very difficult to verify. In addition, the lack of a baseline study and regular monthly reports made it difficult for the evaluation team to measure the success of the project according to the planned immediate outcomes.

The LogFrame identifies three indicators at the impact level:

- Improved levels of income for both men and women youth;
- Increased employment for both men and women youth;
- More diverse sources of income including from non-farm sources.

The choice of indicators points to an assumption of an association between resilience on the one hand, and increased and diversified incomes as well as employment on the other. With the possible exception of the case of employment levels (which can be poorly paid and therefore not necessarily indicative of greater resilience), it is reasonable to assume that a combination of the three indicators can demonstrate increased resilience to external shocks such as conflict or drought.

In spite of a rather weak LogFrame, the intervention logic of the project was straight-forward and UNIDO operated in its area of comparative advantage

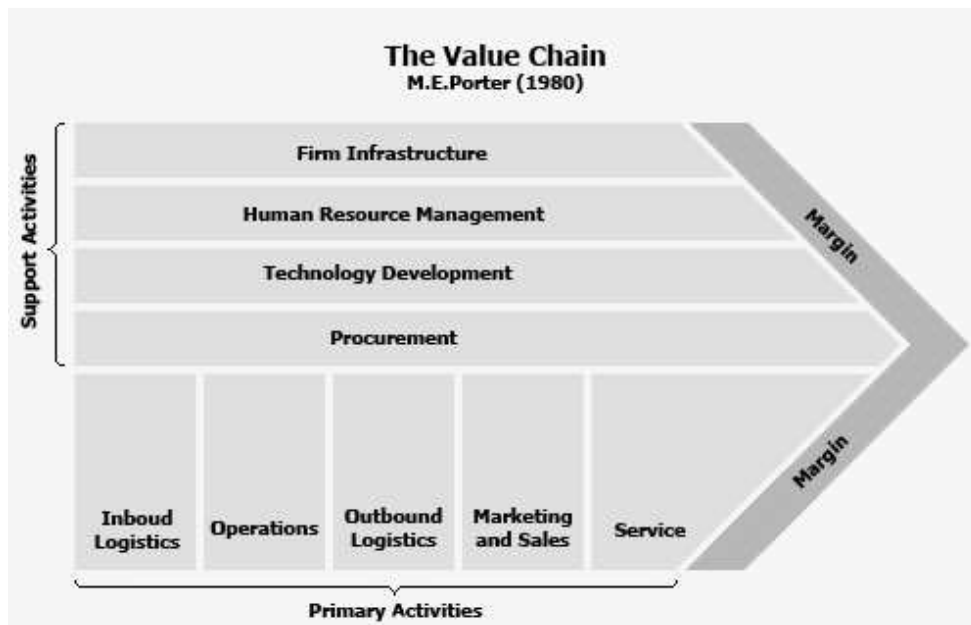
²⁵ SMART indicators are Specific, Measurable, Achievable, Relevant and Time bound.

focusing on enhancing agri-business capacities and private sector development. Having been familiar with the structure of GCs, UNIDO did not start from scratch and utilised the existing institutional relationships established under previous interventions, particularly the Mano River Union and the IP. Inputs from the management of the GCs and training personnel were sought in project planning phase, particularly with regard to the training curricula and preparation of the list of required training materials.

The overall objective of “improving resilience of the local communities in Koindu, Kpandebu, Bo and Pujehun” is difficult to measure. In absence of a baseline study to record the level of income of the unemployed youth as well as their sources of income for the respected communities, it was difficult for the evaluation team to measure the success of the intervention. This is also the case with another outcome of the project, as it simply refers to an increase in production capacities, revenues and profit of the GCs by 10% without referring to a baseline against which the improvement can be measured, and assumed that ready markets existed.

Although not mentioned in the PD, the project has contributed to the first three levels of the agro-processing value chain (see Figure below) with a clear rural development focus by rehabilitating infrastructure and providing high quality inputs such as production equipment and training tools, a solar PV system as well as giving human resources received technical, entrepreneurial and management training.

Figure 8 - The Value Chain (M.E. Porter)



This includes both food-processing equipment such as the steam dryer to enhance agri-business productivity, and livelihoods with the provision of basic

tools and equipment for Auto-mechanics, blacksmithing, brick making, carpentry, gara tie-dying, hairdressing, masonry, metal work, soap making and tailoring. The latter were assessed by the project as supportive economic non-farm activities that help increase coping mechanisms for climatic and economic shocks that usually make livestock and agriculture production volatile. Further up the value chain, the project attempted to enhance product quality to improve its marketability and generate required benefits for producers.

It is notable that the involvement of the private sector (part of UNIDO's core mandate) is not mentioned in the LogFrame or the specific outputs and activities of the project, although the project established partnerships with local entrepreneurs and enhanced their capacities to host on-the-job trainings. Local counterparts are only indicated as the management of GCs and the Ministry of Trade and Industry, the official counterpart of UNIDO in this intervention as well as Njala University on enterprise development activities. Additional partners such as the Ministry of Education, which become involved in parts of activities at a later stage of implementation, had been initially omitted and there were many more linkages the project could have planned.

Despite this omission, the evaluation team observed partial private sector engagement in the project. As mentioned earlier, a number of local entrepreneurs have been selected and trained to provide on-the-job training to young trainees.

For example the GC in Pujehun has established partnerships with local enterprises to accept the graduates as interns and give them the opportunity to receive hands-on experience in the disciplines they received trainings from UNIDO. In Kpandebu, a local businessman has been encouraged to devote much of his land to planting of cassava to supply the agricultural processors with the raw material for flour production.

4.2 Relevance

Overall, the project is found to be of high relevance, especially with regard to UNIDO's country programme priorities and many of those outlined in the previous government's plans (note that Sierra Leone's third general elections took place on 17 November 2012).

Rehabilitation of training-cum-production centres is also very relevant to UNIDO's three (3) main priorities in Sierra Leone, being (i) poverty reduction (by increasing incomes to marginalised people), (ii) trade capacity building (by encouraging agro-processing) & (iii) energy/environment (the solar PV component of the project). The provision of sustainable human development through education and training is one of UN priorities in the country and aims at creating job opportunities for unemployed youth.

Sierra Leone is slowly recovering from a long-standing war that affected its infrastructure and human capital. As the country is trying to attract foreign direct

investments to explore and utilize its minerals, the demand for skilled workers, particularly in technical disciplines, is likely to increase. Therefore, by addressing the youth unemployment, the current intervention is in line with various National Programmes in giving emphasis on the support required for vocational training for the youth and are encouraging entrepreneurial skills development. Page 33 of the Country Vision (2025) states; *“As a country emerging from war, another political imperative is to ensure that former fighters in the civil conflict are fully integrated in their communities...”*

Being located either in the border areas, e.g. Koindu, Kailahun, where the target beneficiaries live, or on a key crossroads, e.g. Bo, the locations and scope of the UNIDO programme is also highly relevant to the government’s policy on bringing ex-combatants back into society because the various trainings have involved a large number of young people in eastern areas of the country that saw some of the worst atrocities during the brutal civil war.

The introduction of solar energy systems as a suitable solution for lack of access to reliable energy supply in rural areas contributes to the first priority of the country on “improving national electricity”. With only a few generating plants and very limited electricity distribution networks yet relatively high electricity costs, even if a Growth Centre is located near a grid line, the service is unreliable and their activities are hampered. So given the abundant local solar resource, solar PV is a highly relevant source of energy to power the agro-processing and business platform services in the Growth Centres.

Last but not least, the project is of high relevance for unemployed youth of rural communities in Sierra Leone. The population of these remote areas has been dealing with several challenges in the aftermath of the conflict, including environmental shocks and food insecurity or malnutrition. As the project tackles both of malnutrition and environmental sustainability, it was considered as highly relevant for the direct beneficiaries. In addition, reintegration of the ex-combatants, one of major peacebuilding priorities of the government and the UN, was partially addressed in this project.

4.3 Project Ownership

In Sierra Leone land is held by the community, which is vested in the hands of the Paramount Chief. Buildings that are used in the community for a state function (e.g. the Growth Centres are seen as local trading point) are regarded as belonging to the relevant Ministry. This also includes the equipment inside the buildings. For the UNIDO project, this would therefore be the Ministry of Trade and Industry (MoTI) and the community is then given the privilege to manage these MoTI assets.

Despite this, the communities around the Growth Centres under evaluation show a high degree of project ownership because the MoTI has historically not intervened and management is done from the local level with full participation of the Paramount Chiefs as Chairs of a Board that decides the fate of the Centres.

Each of the Growth Centres has built up a significant history that gives a high degree of ownership. For instance, the previous manager at Kpandebu died during the war defending the Growth Centre.

Selecting the MoTI as the counterpart organisation for the project was seen as an obvious choice, but as the main activities were centred around training, skills development and agro-processing, it is thought that a better counterpart may have been the Ministry of Education or MAFFS, which is sponsoring activities relevant to UNIDO's activities. The MoTI, while being supportive of UNIDO's work, is not able to bring any resources to the GCs to assist their programmes further, although it is noted that MoTI have a plan for Growth Centre support in Kambia in the north-west.

In all cases the relationship between UNIDO, the GC management and project counterpart, the MoTI, was relatively good and even though nothing was physically inputted to the projects they gave support and time input from their staff and may help on business planning in the future.

4.4 Efficiency

Overall, it was observed that across all sites the project approach could have made better use of given resources for achieving the planned objectives, so the efficiency of implementation of the project is assessed as low. Contributing factors included a weak project design, delays in allocation of funding, and centralised management and procurement.

One of principal outputs of the project was that all GC premises are in good working order and all the purchased equipment will be functional. Although the project document mentions that the Bo GC would benefit from 'premise repair' its full reconstruction was not originally envisaged and a significant change was made to the project after it started in mid 2011 to give more emphasis to the Bo location. However, as a large share of the budget was spent on reconstruction of the GC in Bo, financial constraints affected project performance in other areas, including shortcomings in monitoring and coordination of trainings in Kailahun, and insufficient funds for other priorities such as the Pujehun boundary safety fencing and building upgrade, and water and sanitation repairs.

That being said, it was recognised that delivering the rehabilitation and training work in remote areas, with the road conditions that are especially bad in the rainy season with long journey times, have been challenging (see Figure 9).

Figure 9 - Typical road conditions in the east of the country



4.5 Financial implementation

The project had 2 main components, firstly the rehabilitation of training production-cum-training centres to conduct training and secondly the provision of reliable energy supply by establishing solar PV systems at each of GCs. Approximately one third of the budget (US\$ 602,500) was planned to be channelled to the solar PV systems, nearly one quarter to the construction works and rehabilitation of the respective GCs (US\$ 448,000) while over 40% was allocated for staffing and support costs (US\$ 878,300) see Table 3.

It is noted that the small 3.6% remainder of the budget (US\$ 71,200) was to be paid for the equipment required by the GCs. This is assessed as insufficient for meeting the main objectives of the project, namely the expanded agro-processing capabilities of the Growth Centres and capacities to run training programmes for the youth. Analysis of the procurements done at the national office shows that only US\$ 44,037 was spent on equipment (aside from solar PV) and US\$ 13,410 of that was for one steam dryer for Kpandebu. No purchases were found of agro-processing machines or repair thereof. Most of the GCs visited by the evaluation team still either lacked many of the necessary equipments to carry out their processing needs and conduct training they were supposed to offer, or those that were in place were poorly maintained.

Table 3 - Main items in project budget

| Description | Budget (US\$) | % share |
|--|------------------|-------------|
| Photovoltaic solar energy system (including consultancy) | 602,500 | 30.1% |
| Equipment (food processing, training materials etc.) | 71,200 | 3.6% |
| Other consultants (national, entrepreneurship, professional assistant) | 225,000 | 11.3% |
| All staffing | 318,500 | 15.9% |
| Construction technicians, site manager and construction training materials | 448,000 | 22.4% |
| Miscellaneous & Evaluation | 104,712 | 5.2% |
| UNIDO support costs | 230,088 | 11.5% |
| TOTAL | 2,000,000 | 100% |

Although an effort has been made by the evaluation team, it has not been possible to gauge the exact expenditure against these budgeted items as not all of the relevant documents have been made available through the UNIDO intranet or from the national office. What has been made available (i.e. MOD payments but only those between May - August 2012 and the solar energy component through its financial report) is summarised in Table 4.

Table 4 - Summary of expenditure as gathered by evaluation team

| BL | Description | Budget | As gathered |
|-------------|---|---------|-------------|
| 11-51 | International photovoltaic solar energy consultant | 45,000 | 118,067 |
| 11-52 to 54 | Other consultants (entrepreneurship, professional assistant) | 153,000 | 3,370 |
| 13 | Admin assistant & drivers | 36,000 | 2,660 |
| 13-50 | Construction technicians and short term administrative assistants | 144,000 | 7,095 |
| 15 & 16 | UNIDO travel | 44,000 | 9,143 |
| 17-01 to 04 | National UNIDO staff | 101,000 | 9,260 |
| 17-05 & 06 | Lawyer and architect | 34,500 | ? |
| 17-07 | Construction site manager | 38,500 | 3,690 |
| 17-08 | Management and accounting specialists for each site | 99,000 | ? |
| 17-11 & 50 | National consultants | 37,500 | ? |
| 33-00 | In-service training including construction training materials | 304,000 | 533,625 |
| 45-00 | Equipment (food processing equipment, sewing machine, block-making equipment, PCs, photovoltaic solar energy systems, copier, scanner) | 628,700 | 660,902 |
| 51-00 | Miscellaneous (operation and maintenance of vehicle and other equipment, office utilities, document reproduction, public relations materials, consumable) | 58,412 | 3,127 |

| BL | Description | Budget | As gathered |
|-------|----------------------------|------------------|------------------|
| | office supplies, sundries) | | |
| 82-00 | Evaluation | 46,300 | 23,810 |
| | UNIDO support costs | 230,088 | 230,088 |
| | TOTAL | 2,000,000 | 1,604,836 |

Although the above expenditures amount to nearly US\$ 400,000 less than the total budget, it is understood that the project overran its total budget. It is also noted that of the known costs (gathered from procurement records for the construction work and solar PV installations) the overspend was considerable, being 76% more for the construction (mainly due to the need to complete the building at Bo although it was never planned in the original PD) and 167% more for the solar PV component as a whole, possibly due to underestimating the complexity of mobilising sophisticated energy systems in remote areas with difficult field conditions.

The detailed solar component costs are summarised in the following table compared to the estimated capital costs from TERI's and with Sunlabob's contracted cost information with other suppliers and works (such as the civil constructions) added in. In addition the following were spent on support costs, making the total of US\$ 734,931 for the whole Solar PV project:

- Personnel - US\$ 118,067
- Training - US\$ 24,579
- Misc. - US\$ 3,538

Table 5 - Planned and actual costs of PV systems

| Growth Centre | Solar PV Capacity planned | Estimated (TERI) cost (without civil & internal electrical works) | UNIDO contracted cost (fully installed) |
|---------------|---------------------------|--|---|
| Bo | 20 kWp | US\$ 180,124 | Sunlabob - US\$ 423,135 |
| Pujehun | 16 kWp | US\$ 156,960 | |
| Kpandebu | 16 kWp | US\$ 156,960 | Extras - US\$ 165,612 |
| Total | 52 kWp | US\$ 494,044 | US\$ 588,747 |
| | | UNIDO's PAD | US\$ 462,759 |
| | | Underestimated by | US\$ 125,988 |

Although the original budget was not sufficient by a large factor, for a final installed cost of US\$ 11,322 per kWp, in the end this is regarded as reasonable for high quality off-grid PV systems installed in remote areas under a development programme.

4.6 Management

The project was implemented by UNIDO from its country office in the capital, Freetown in collaboration with pre-existing GC managers and staff. The official counterpart was the Ministry of Trade and Industry (MoTI). At the local level, supervision was planned to be from the local district government, with day-to-day co-ordination by the Paramount Chief of each community.

In terms of involvement of the counterpart, MoTI has remained present and aware of the project progress and the Minister, Dr. Richard Conteh, has visited all of the sites at key junctures in the projects, such as at handing-over ceremonies and graduations (see for example UNIDO's internal report under Annex 7).

MoTI did not fund the project and was not responsible for any of the activities, but continued to give support to the project throughout. A meeting with the Minister confirmed that MoTI supports the GC model subject to the condition that self-reliance of GCs through a clear management structure is secured. In mid-2012, MoTI announced that it would support the establishment of additional GCs in other parts of the country.

Although the management structure at the GCs developed to date does involve a wide range of local stakeholders, including Paramount Chiefs, local government representatives, teachers, business people etc, project steering committee/management meetings were less frequent than planned. In addition, there was evidence for a lack of transparency by UNIDO, for example in not providing all project documents and lists of equipment supplied to the GCs.

With emphasis on undertaking the construction work and electrification of the centres, it is clear that food processing equipment shortcomings remain. For example in Koindu, there is a good opportunity for rice milling and cassava processing because of the border region markets of Guinea and Liberia. More room is also required at that centre for extra activities that would be beneficial to the local youths, e.g. blacksmithing, auto repair, weaving and masonry.

Other small issues were noted in project planning. Some building works lacked attention to important detail, for instance the stone gravel exterior to Bo's Growth Centre, which is dangerous for wheelchair users and other disabled trainees. Also, no Personal Protective Equipment (PPE) such as gloves, helmets and work boots were given to the construction trainees and there were two cases of broken legs during the construction work at Bo.

A small amount of extra UNIDO funds to reach the field would have made a large difference in the quality of the training environment and in the processing operations, for example the blacksmiths in Koindu would benefit from a concrete floor. Attending to this kind of small detail should have been part of the UNIDO budget, especially as the blacksmiths are generally disabled and sit all day on the floor.

Figure 10 - Blacksmiths (often disabled) in Koindu working on earth floor



4.7 Reporting, monitoring and evaluation

The implementation of the project was monitored and documented by the national project coordinator, who travelled to the field on a regular basis and submitted 'back-to-office' progress reports. In addition, regular reports were produced on the ToT in Guinea.

Though the progress of project was documented and reported to HQ, the evaluation team has observed a lack of effective communication between UNIDO and the management of the GCs, as main partners of UNIDO at the local level. Particularly in Kailahun, the absence of a project coordinator (where there used to be a local person to fulfil this role until UNIDO closed the local office) brought about a lack of leadership that detracted from results in that location.

Although the GCs themselves could have acted as hubs, UNIDO did not have any offices in the field at the time of the evaluation, so staff operated out of Freetown travelling to site as required by road, making inefficient use of time and financial resources. UNIDO's co-ordination in the field has therefore not been consistent during the project implementation. Although there was at one time a sub-office in Kailahun, consisting of a room and desk within another development agency, this was closed in early 2012 much to the disappointment of the local coordinator, who was also cut from the programme. The absence of a local coordinator/mentor left no focus for activities in the far east of the country, and particularly affected the quality of trainings.

The drivers had short-term contracts to match the availability of funds at any given time, which did not help proper planning for the trips made out to the 5 project locations. There were pressures on staff to support other UNIDO projects, e.g. the Binkolo Growth Centre.

Lack of feasibility study, risk analysis and training needs assessment

Although the project aimed at rehabilitating the selected centres, no feasibility study was carried out to see whether renovation was possible. As a result, the Bo Growth Centre had to be completely reconstructed, as the original structure was not fit for purpose.

Furthermore, with over 50% of the project budget used for construction and solar PV systems (although the latter was ring-fenced under a different project manager in HQ) not enough budget was left to properly support trainings, food processing and other important activities. In addition, delays in procurement and challenges with regard to human resources in the construction of the Bo building, including replacement of the originally selected local construction manager, consumed the major part of financial and technical resources of the intervention.

Because of the original short time frame of 12 months for project implementation and the emphasis on getting the construction work at Bo completed, no Training Needs Assessments (TNAs) were planned and there was no evidence of TNAs having been done, which put the training-based intervention at risk from problems and delays, e.g. the most part of the construction work was carried out by on-the-job trainees, some of whom had limited literacy and numeracy abilities.

Late delivery of energy component

The energy component was planned to be implemented in early 2012 to avoid the onset of the rainy season in July - August, but in the end the systems were only delivered in July and were being installed during the time of evaluation. In delivery of the solar PV component, some time was misspent in the technical design of two of the projects because the size of the PV systems in Bo and Pujehun were changed by 5 kWp at the last minute when Sunlabob were already in Freetown and preparing for the site work, giving little time to adjust technical plans. Further delay resulted from having no lightning protection level specified in UNIDO's documentation, yet Sierra Leone has 30 - 50 lightning strikes/km per year, so Sunlabob ensured that this requirement was added in-country to the National Power Authority specification.

In Pujehun the civil works plinths for the ground-mounted array were not correctly installed and had to be removed and replaced once Sunlabob arrived on site. The battery rooms were designed and built locally without proper input from the contractor which caused change to be made during the installation of the systems.

In Bo, the purpose-built battery house was not appropriately located and workshop space had to be used for the batteries and controllers.

In Pujehun a new space had to be created losing much of the sewing/weaving teaching) area (see Figure 11 and Figure 12).

**Figure 11 - Bo battery house
in training area**



**Figure 12 - Pujehun battery house
(behind classroom)**



The contractor faced several delays on reaching Freetown to deal with customs clearance and local logistics (e.g. a reliable vehicle), yet UNIDO seemed unable to help resolve matters for the efficient delivery of the projects, due to procedural and contract responsibility concerns when simple communication would have found a solution quickly.

Finally, more technical information should have been shared with the GC management; e.g. in Bo they were not aware that 3-phase had already allowed for in the design and were unsure whether the air conditioning units could be connected (they cannot). In Pujehun, they were unsure what would happen in placing the existing loads on the new system.

The evaluation team also assessed that some of solar PV resources should have been spread to the Koindu GC to upgrade their system and to provide for a back-up diesel generator (the powerhouse was already built for this purpose) to secure their growing power needs.

Selection of beneficiaries for trainings

Trainees were chosen from different chiefdoms around the Centres, with a focus on those who couldn't attend or who had dropped out of school. The age of trainees had to be 18 years and above and they were managed by the relevant trainers and, in the case of Bo, a full-time construction site manager, some paid under the UNIDO project. 50% of the trainees were to be female.

The young men and women from communities in Bo, Kailahun, Koindu, Kpandebu and Pujehun above the age of 18 who were not able to attend the formal education or were dropped out of school were primarily targeted by the project. The different categories of beneficiaries of this intervention included the following:

- i. The primary beneficiaries of the project included the 270 enrollees in different disciplines.
- ii. The secondary clients consisted of the trainers of the GCs in Bo, Koindu, Kpandebu and Pujehun as well as local entrepreneurs from Kailahun, who attended the ToT in Guinea.
- iii. Since the project has transferred technology and know-how, including user-friendly food processing machines and solar PV systems to the GCs and provided their management with management skill training workshop, the institution of the GCs can be suggested as the third level of beneficiaries.
- iv. The indirect beneficiaries of the project include the communities in the border regions of Sierra Leone, which meant to become more resilient towards shocks.

According to the quantitative survey, trainees were informed about the training programme through various sources depending on the location of the training. For trainees from the small community where the Kpandebu GC is located, the primary source of information was through relatives, either direct parents or guardians as indicated in Figure 13.

Radio was mentioned by trainees from Pujehun as the first and for those from Bo as the second source of information. In Bo, radio announcement was led by the Child Fund, which supports youth empowerment through livelihood and skills training in various institutions. Kailahun had a unique situation as the trainees were pursuing courses prior to the UNIDO training and all except three of the respondents first heard about the training from their trainers. Only one of the enrollees in Kailahun mentioned hearing first about the UNIDO programme through radio.

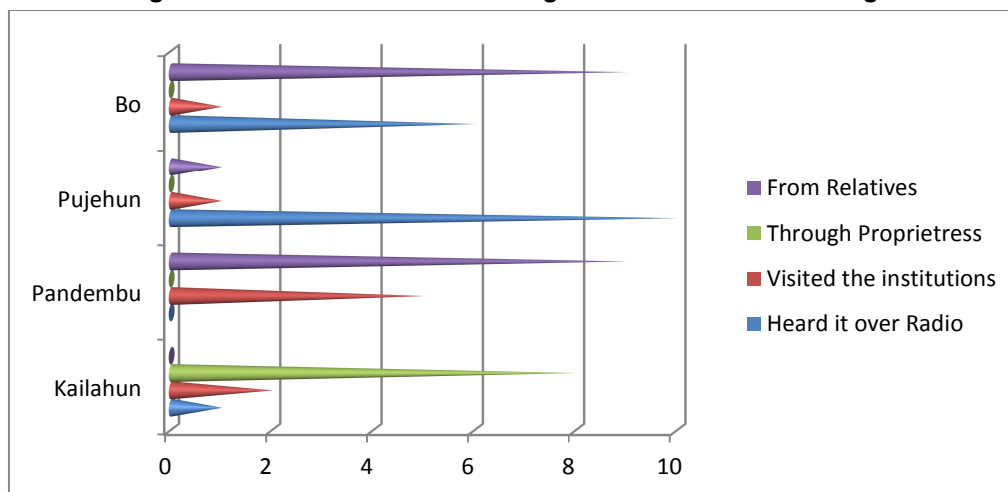
Quality of training

Evaluation survey respondents from all GCs and workshops expressed satisfaction with the skills and knowledge of their trainers, whom they believe handled the trainings with professionalism. According to the respondents, the trainers have improved the knowledge and practical skills of the trainees. Particularly, those trained in food processing were satisfied that they learned to process variety of cassava food products including gari, foofoo, flour and “Acheke”²⁶, a popular food consumed by Guineans. Respondents in Kailahun rated their satisfaction with their trainers based on the level of satisfaction of their

²⁶ A starchy couscous-like grain made from cassava. It is usually eaten with grilled chicken or fish. (<http://www.africansandjamaicanskitchen.com/menu.html>).

clients. Without a single exception they all confirmed their clients had always expressed with satisfaction with their service.

Figure 13 – Source of first knowledge about the UNIDO training



4.8 Effectiveness

Assessment of project effectiveness was hampered by the fact that the evaluation mission took place before project completion when a number of outputs remained outstanding. Regardless, the project was found to be reasonably effective.

A summary description of the status of outcomes and outputs is given in Table 8, p.54. In addition, an assessment of the 34 activities within the 4 outputs has been undertaken, ranking the importance of each one (1-5) and giving a traffic light score as captured from the brief evaluation period, as shown below in Table 9, p.56.

The main outcomes of this phase of UNIDO's intervention were stated as:

- a) The GCs use the new equipment, infrastructure and training to expand and improve the quality of their commercial operations in processing local agricultural produce; and
- b) Young men and women in the communities have improved capabilities in agro-processing, agriculture, entrepreneurship, computer literacy and internet communication.

Related to these outcomes are 4 outputs that are geared toward supporting the Growth Centres in four locations (Bo, Koindu, Kpandebu and Pujehun) with:

1. Renovation and upgrading of facilities;
2. Access to renewable energy;
3. Improvements to management;
4. Skills training for the youth.

Outputs 1 & 2: Renovation and upgrading of facilities & access to renewable energy

In terms of infrastructure rehabilitation, the GC in Bo saw the most benefit from the project, which rebuilt the Centre (see Figure 14 and figure 15).

**Figure 14 -
Bo Growth Centre before**



**Figure 15 -
Rehabilitated Bo Growth Centre**



Unforeseen allocation of funds to Bo had knock-on effects to the centres in Pujehun, Koindu and to some extent in Kpandebu, where the required upgrades on the buildings did not receive adequate attention. For instance Pujehun fencing and building upgrade, all toilet facilities and safe water supply have not been fulfilled. Upgrading and renovation activities for other GCs were limited to some construction work related to the PV system. Only in Koindu and Kailahun was there evidence of office equipment provided.

Although the solar PV systems were being installed at the time of the evaluation, there was no concrete plan for transmission lines to power agro-processing machines. Moreover, many machines (e.g. hammer mill in Kpandebu and rice mill in Pujehun) were not functioning and required repair in order to have the full suite of food processing capabilities.

The solar PV impact from Koindu, which had an original UNIDO PV system but did not benefit from this phase is that; i) the 1 kWp scheme does not provide enough power for all the GC needs at once (DSTV, refrigeration, computers, lighting, phone charging) so load shedding has been employed, ii) the system does

not allow for expansion for productive uses (e.g. rice milling and tailoring) and iii) cannot provide for pumped water, which is affecting sanitary conditions.

There is however on the back of UNIDO's intervention, a new solar project in Sierra Leone (the Solar Powered Local Enterprise Development Platform Project for 9 sites across the country) which should address the problems in Koindu, as long as the plan is communicated clearly to the local stakeholders and their needs are responded to.

Figure 16 - Bo Growth Centre 25 kW PV system fully installed



Solar PV panels (104 in total) have been installed in the Bo GC with a capacity of 25 kW against an original target of 20 kW. Small items such as Grinder, Hand Drill and the tailoring & weaving machines can be plugged into the PV, but the larger metal working machines would require a diesel generator, which was not in place at the time of evaluation. The computer room remained in need of equipment and stocks. Moreover, a new well and hand pump built a part of the development and an electric pump also delivers water to a header tank. In Kpandebu, 67 solar panels were installed to provide 16 kW of power.

Table 6 - Solar PV development at the Growth Centres

| Growth Centre | Situation before | Original plan (Feb 2012) | Final installation (Aug 2012) |
|---------------|----------------------------|--|---|
| Bo | 1 kW solar PV, 8 batteries | 20 kW with 48 x 2300 Ah battery bank | 25 kW (104 panels) on workshop roof and battery bank in workshop room |
| Pujehun | 1 kW solar PV, 8 batteries | 16 kW with 48 x 2300 Ah battery bank and 1.5 km distribution network | 11 kW (46 panels) ground-mounted and no distribution network |
| Kpandebu | 1 kW solar PV, 8 batteries | 16 kW with 48 x 2300 Ah battery bank and 1.6 km distribution network | 16 kW (67 panels) ground-mounted and charging point |
| Kailahun | No GC hub | Not applicable | not applicable |
| Koindu | 1 kW solar PV, 8 batteries | none | none |

The Pujehun GC was provided with 11 kW of power with 46 solar panels against an original target of 16 kW, as it was decided that the 5 kW would be better suited to Bo. Construction of the distribution network in Pujehun remained pending at the time of evaluation.

A detailed analysis of the expected demands at each Centre indicates that for the total current energy demands to be catered for by the solar systems, the battery banks as designed can provide 2 days' storage capacity in Bo and 3 days each in Pujehun and Kpandebu.

Figure 17a - Pujehun Growth Centre 11 kW PV system in construction



The actual installed battery banks were the same as in the original specification. If the local demands were to grow 20% in the future, there may not be sufficient storage for rainy periods, although this would have to be studied after 6 months once the actual demands are known.

Figure 17b - Kpandebu Growth Centre 16 kW PV system in commissioning



Related maintenance training this was delivered to specifications for all GCs except in Bo where the managers appeared unaware that solar batteries were not designed to power air-conditioners.

There are existing facilities to dry cassava in different ways, for example at Kpandebu using the newly built drying floor to sun-dry not only cassava but also fufu or cacao and steam drying using the new UNIDO provided equipment. However, there are no plans to electrify drying processes using the free solar system as the correct technology has not been discussed with the key stakeholders and may not be available.

Water systems in 3 out of 4 of the centres were not functioning properly to provide safe water supply despite the electrification being made available. At the time of the evaluation Sierra Leone was facing the worst cholera outbreak in its recent history which has seen 18,500 cases and claimed 271 lives²⁷. In addition to providing hygienic sanitation facilities, there is a need for basic education concerning water, hygiene and sanitation in the community.

In Pujehun the originally-built water well has never been used and there was no plan to integrate pumped water from the solar system, as this was confirmed as outside the scope of the contractor. In addition, problems from the original Pujehun building contract have not been resolved, e.g. toilets were not functional, food processing machinery area floor was breaking up, the main roof leaks, and walls where gari roasting takes place are not built to standard (Figure 18).

Figure 18 - Construction rehabilitation required at Pujehun GC



The new solar PV system and other valuable equipment (e.g. diesel generator and food processing machines) are at risk from theft as there is no boundary wall at Pujehun. The importance of securing the Growth Centre was demonstrated in Kpandebu which had UNIDO funding for a boundary wall, as this enabled it to establish a partnership with Green Africa to breed 1,000 chickens on site.

²⁷ <http://www.ft.com/cms/s/0/f438273e-ef2c-11e1-9da8-00144feabdc0.html#axzz26SepjzVP>

Output 3: Improvements to management

The project provided only modest capacity building support for GC managers. Development of a curriculum for training of GC Board Members remains outstanding, though some training has been provided.

In all GCs, the managers have played a critical role in the implementation of trainings, monitored the quality of trainings, and performed a mentoring role to the trainees, motivating them to proceed with their education.

Although the stakeholders and beneficiaries are highly committed to the operation and maintenance of the lighting and electrical services offered by solar PV, the design had not been fully explained to them. For example in Bo, managers did not know why the panels were not on the main building roof and why one workshop area was used for batteries instead of the purpose-built battery house.

With respect to marketing and entrepreneurship training, the management did benefit from the UNIDO consultant brought in to conduct these trainings²⁸, although the evaluation team was not given any report describing this output. For the agro-processing and solar PV trainings, which are important because of the operation and maintenance (O&M) of the equipment, there was little evidence of managers yet involved in preparing for future O&M because the projects were still in the implementation phase.

None of the CGs enjoys a clear legal status. A lawyer was recruited to guide the legal status and a field visit made in October 2010 to Bo, Kpandebu and Pujeheun and a short report written guiding the formation of a company with Board of Directors to run their affairs, but recommending that only Bo had the capacity to take this route. However, two years on from that report, there is a need to re-assess those initial findings.

Output 4: Skills training for the youth

As indicated in Table 7 below, various trainings in a wide range of disciplines were offered at the time of the evaluation survey, with business skills, tailoring, and carpentry being offered at all the centers.

Although, the project document did state that 30% of the beneficiaries would be women. However, in practice, this was not achieved in a number of disciplines such as welding, blacksmithing etc. The project trained a total of 360 people in total, though gender disaggregated data was not made available to the evaluation team.

²⁸ Billy Butamenya from Uganda

Construction and rehabilitation skills were learnt through on-the-job training, with certificates issued to those completing the training. Due to the rural setting of GCs such as in Kpandebu and Pujehun, with comparatively increased cultivation of food crops, food-processing training was prominent. The Growth Centres are recognised by the community as the only place where the trainees can learn how to process food. The Pujehun and Kpandebu sites had already established partnership with the WFP and Salone Food and are supplying them with products such as cassava flour. Producing “acheke” was stated by trainers as one of the good developments in food processing activities and supplies have been made to some restaurants in Bo and Monrovia.

In Kailahun, local enterprises were selected under the programme to offer trainings, mainly in non-farm related disciplines. Although computer training was planned to be part of the training programme at both Kpandebu and Bo, there is still much room for improvements.²⁹

Table 7 - List of courses offered by location

| Type of Skills | Growth Centre Location | | | | |
|----------------------------------|------------------------|----------|---------|-----|--------|
| | Kailahun | Kpandebu | Pujehun | Bo | Koindu |
| Hair Dressing | 1 | 0 | 0 | 1 | 1 |
| Carpentry | 1 | 1 | 1 | 1 | 0 |
| Masonry | 0 | 1 | 1 | 1 | 0 |
| Tailoring | 1 | 1 | 1 | 1 | 1 |
| Food Processing | 0 | 1 | 1 | 0 | 0 |
| Gara-Tie-Dyeing | 1 | 0 | 1 | 0 | 1 |
| Computer Studies | 0 | 1 | 0 | 1 | 1 |
| Soap Making | 1 | 0 | 0 | 0 | 1 |
| Auto-Mechanics | 1 | 0 | 0 | 0 | 1 |
| Blacksmithing | 1 | 0 | 0 | 0 | 1 |
| Metal Work | 0 | 1 | 0 | 1 | 1 |
| Life skills (business skills) | 1 | 1 | 1 | 1 | 1 |
| Total # of trainees | 65 | 36 | 90 | 125 | 44 |

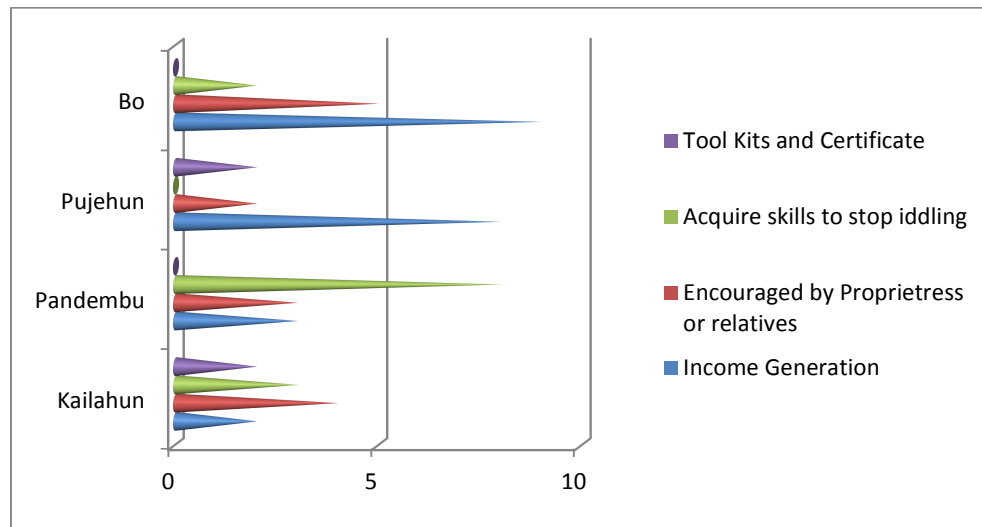
Trainings in agriculture, gardening and computer skills have been also offered. According to a trainer of business management in Pujehun, 75 trainees were also enrolled in wider trainings in each semester, with the syllabus covering business management, basic literacy/numeracy, entrepreneurship skills, HIV/AIDS education, and one planned on gender equality awareness. According to trainers

²⁹ In fact, there are very few computers available - only one computer at each GC was functional during the second evaluation visit. (according to the report of the National Evaluation consultant).

in Bo, compared with other VTCs, only the Growth Centre offers such additional syllabuses.

While some of enrollees attended the training to receive tool kits, start up kits or a certificate, others mentioned acquiring skills, stop idling and roaming about or generating income and improving their livelihood as the main motivation (see Figure 19).

Figure 19 – Respondents Motivating Factors



At the Outcome level (Young men and women in the communities have improved capabilities in agro-processing, agriculture, entrepreneurship, computer literacy and internet communication), all 53 evaluation survey respondents - including those still in training - confirmed that the training had improved their skills. Interviews with the Minister, local authorities, and the GC managers, trainers and trainees confirmed that provision of training to people within vulnerable communities does actually contribute to their livelihood and reintegration in the community. It was reported that training female trainees in non-traditional disciplines has improved their position in the community.

With regard to the number of trainees who could find jobs or set up their own businesses, soap making and gara tie-dyeing seem to be among the most successful training disciplines. Trainers have been able not only to cover the running costs of the training and to obtain raw materials; they also managed to have some savings.

However, the number of the trainees who have created their own business is still very limited. Moreover, trainings had a limited area of outreach and benefitted fewer women as compared to men.

Although, all beneficiaries stated that their skills has improved through the training, none of the trainees surveyed in Bo believed they had attained the capacity to search for employment, as they observed there was still more to learn. In contrast, all the trainees surveyed in the Pujehun GC were confident they had reached the level of skills to find gainful employment or to establish their own businesses.

Similarly, most of trainees in Kailahun stated that they have gained the appropriate capacity to find jobs, while only two respondents from the Kpandebu GC had the same confidence.

Nearly half of trainee respondents stated doing some form of business while still being in training. Particularly, trainees of carpentry, masonry, food processing, tailoring and gara tie-dyeing are already making some cash from the skills they have acquired. In some cases, such as in Bo, the carpentry trainees receive part of what their trainer awards/earns from contracts.

According to trainees of tailoring and gara-tie-dyeing, during festive seasons such as Christmas or Ramadan, most parents order new dresses for their children. In the gara-tie-dyeing unit at the Pujehun GC, the trainees buy their own materials, process them and sell them to the customer.

These are clear indications that even in remote areas the skills delivered are in demand. A similar situation exists for the food processors at Kpandebu GC, where contracts were awarded from farmers to process their cassava in return for fees.

Income generated is yet very little for nearly 50% of the respondents. The highest income generated is from the gara tie-dyeing unit, which on an annual basis could be as high as Le 300,000 equivalent to US\$ 75. However, in some disciplines such as in hair-dressing, generating income while still in training was difficult. Most trainees in hairdressing offered their skills to their neighbours and relatives with no or low remuneration.

Though it was too early in the implementation phase to fully assess the project's other intended Outcome (The GCs use the new equipment, infrastructure and training to expand and improve the quality of their commercial operations in processing local agricultural produce), there was some evidence of limited success in this area. The main source of income for the teaching personnel comes from selling the products made in the trainings, which are distributed among them.

Unlike the teaching personal in Bo, Kailahun or Koindu, the trainers in Pujehun and Kpandebu do not seem able to raise income by selling their own products, probably because of distance and lack of access to the market. Two trainers stated in an interview with the evaluation team that their main source of earning comes from their participation in trainings organized by other international

organizations or NGOs such as IITA or WFP. In addition, maintenance of the training equipment has not been foreseen which endangers the quality and sustainability of the trainings.

The trainers have been co-operating with each other in order to utilise as much out of the project for their income needs, and sometimes they exchange particular services (e.g. between auto-mechanics and welding disciplines). There was also co-operation seen for the trainees; the gara tie-dyeing trainees in Kailahun contribute Le 200 per day each (5 US cents) for their communal food needs, delivered through cooperation with the WFP.

Sustainability

Assessment of sustainability produced mixed results, as it was too early to judge with confidence. Linkages have been forged for future training and agro-processing programmes, but Kpandebu seems to have a reliance on IITA for its linkage to the WFP and marketing advice for agri-products, although a chicken raising project (1,000 heads) is likely to start soon with support from Green Africa. In Pujehun, although they had supplied 800 bags of gari³⁰ to the WFP and also had links with IITA, the manager did not seem certain of continued supply to the market (e.g. through the SALONE brand – see Figure 20).

Employment opportunities

When asked about the employment opportunities after graduation, trainee carpenters from Kpandebu were not confident to find employment in their communities after graduation. Although the trainees of other disciplines were confident that jobs would be available after graduation, the discussion with the manager of the centre showed a different point of view. Particularly in the case of the metalworking unit, not only were raw materials difficult to come by, selling the finished product was challenging.

According to respondents, prospect for availability of jobs or income earning opportunities in Kailahun for all disciplines except auto mechanics was also reported to be high. The latter is due to the fact that there are few vehicles in the township, though the situation might improve in the years ahead when new roads to the district could be constructed.³¹ Located close to the borders with Guinea and Liberia, Kailahun district traditionally had a good businesses environment.

³⁰ *Gari* is a creamy-white, granular flour with a slightly sour, fermented flavor from fermented, gelatinized fresh cassava tubers. *Gari* soakings is a delicacy in Ghana that cost less than US\$1. One can simply soak *gari* in cold water, add a bit of sugar and roasted groundnut (peanut) to taste, and add whatever quantity of evaporated milk one desires. *Gari* soakings prepared with coconut water may taste better.

³¹ The Government of Sierra Leone has extensive plans to improve roads and streets throughout the country. In fact, the road from Kenema to Kpandebu about seventeen miles to Kailahun town is already under construction and the evaluation team was able to observe some of road construction projects which are being implemented by World Bank or some foreign contractors.

By taking part in the ToT conducted in Guinea, the trainers acquired entrepreneurship and resource management skills and now have saving accounts. Trainers stated that having received the training by UNIDO they now are given more contracts and their income has increased. With the help of UNIDO, many trainers say that they are on the start of the path to being more resilient against shocks.

The results of the survey regarding employment need to be considered as preliminary, as the project was not completed at the time of the survey, and some evaluation survey respondents were still being trained.

Financial sustainability

The real cost of gari processing was found to be 1.9 - 2.5 times higher than market price even with the reliance on free inputs of labour and some raw materials (e.g. soya beans from IITA). In Pujehun, the real cost of gari processing is summarised:

It costs Le 270,000 (US\$ 62) for purchasing 15 bags of cassava tuber, needed to produce one bag (70 kg) of gari, which sells in the market at Le 105,000 (US\$ 24), i.e. 2.5 times less.

In Kpandebu, the real cost of fufu processing is summarised:

It costs Le 320,000 (US\$ 73.5) for purchasing the cassava needed to produce one bag (80 kg) of fufu, which sells in the market at Le 170,000 (US\$ 39), i.e. 1.9 times less.

At present, the community provides the GC with rice or cassava, but in order to become competitive, the GCs need to plant/grow their own cassava/rice, and to have larger cassava processing machines (the available food processing machines are only suitable for food processing on a small scale). WFP with its extensive food distribution projects in West Africa, has been buying some of the processed cassava, particularly the bagged flour.

To enhance profits, the community was advised by the IITA to mix ground soybeans with Gari powder. Soybeans were given by the IITA but are not available at the local market and therefore using this method is unlikely to be sustainable. The community has tried to replace ground soybeans with some local beans but the product doesn't suit the purpose as makes it inedible.

A "Youth to Youth initiative" has also come out of UNIDO's intervention in Kailahun. Once the trainees are trained in blacksmithing, they start to work at the metalworking and equipment production centre nearby. The graduates share their income, which they receive from their contracts with other trainees as well as contribute to the maintenance and sustainability of the centre.

To start their own businesses, the graduates would need financial assistance. However, the project has largely overlooked this issue, and has not established partnerships with local financial institutions to provide loans. Although, this might be due to the limited timeframe of the intervention, it needs to be considered in any future intervention.

The evaluation team observed that some basic requirements for GCs for commercial operations are still missing, e.g. despite promises by UNIDO, the carpentry centres seen in Bo and Kpandebu have never been properly resourced. In most cases, tools provided by UNIDO suit training purposes and are not suitable for running a business. In addition, some businesses such as the carpentry in Kpandebu and Pujehun need licenses to be allowed to operate. Proper consultation with the trainers may have allowed these issues to be resolved before they occurred.

Private sector participation

The project document does not mention any major private sector involvement in the project. However, in Kailahun local entrepreneurs were trained and provided the trainees with on-the-job training. In Kpandebu, the GC has established partnerships with local carpentry and masonry enterprises that offer internship opportunities to the trainees in the respected disciplines. The community hopes that this mandatory internship would help prepare graduates to find employment. The Kpandebu GC also has plans to partner with Green Africa³² to raise 1,000 heads of chicken, which would contribute to food security and sustainability of the community.

Figure 20 - Cassava flour produced in Pujehun GC



Institutional sustainability

The project builds on already existing institutions and focuses on improving their capacities to generate employment and income for the most vulnerable members of the local communities.

³² <http://africa4green.com/>

Several Growth Centres have established useful partnerships with various agencies, such as:

- FAO (for cassava processing);
- WFP “Process for Progress” (delivery of bagged cassava flour);
- German “Welt Hunger Hilfe” (seen in Kpandebu and Pujehun); and
- UK Voluntary Services Overseas (VSO) at the Binkolo, which is part of the GC family.

The major sustainability issue with respect to GCs seems to be that of ownership of their assets. It is understood that while the land belongs to the community, the GCs officially have to be under the Ministry of Trade and Industry. In some of GCs such as Bo, the handing over of the building is a priority for the Boards, managers as well as the direct beneficiaries.

Although different legal structures have been discussed, i.e. a co-operative, sole proprietorship, limited company etc, this issue still needs to be properly sorted out, as the project failed to deliver the respected activity under output 3. In this regard, the case of the new MoTI Growth Centre in Kambia could be of interest, where a co-operative structure will be set up, with the community owning assets.

The underdeveloped trade capacity of the Growth Centres seems to be one of major challenges of their economic sustainability. This, however, cannot be developed without a vehicle, as most of the GCs, with the exception of Bo, are located in remote areas.

It was noted that a small tractor with trailer donated to the Kpandebu GC was in disrepair. Particularly for Kpandebu and Bo, a vehicle would be one of the most important requirements for marketing the products in Kenema and Bo. It would enable the GC to bring its products to trade fairs/trade markets in surrounding areas.

The linkage to Njala University on development of entrepreneurship curriculum is a positive attempt to help secure sustainability for the future. Additionally, the Ministry of Education, Bo Town Council and local NGOs, e.g. Finnish Refugee Centre, Child Fund, UNAIDS, have brought in some funding for vocational programmes and Bo has established partnerships with them to cover trainees tuition fees and expenses.

Despite the proactive role of the GCs establishing linkages with different partners that cover the whole range of the value chain, from supply, process and demand, there is still much room for improvement. Indeed, the evaluation team noticed that some GCs rely mostly on organizations such as IITA for the supply of cassava in case of the food processing activities.

Environmental sustainability

Although the project has provided the respected communities with environment-friendly solar PV systems, there have been no plans to use this source of energy in the food processing activities, which leaves the traditional use of charcoal untouched. Sierra Leone faces extensive deforestation and is currently losing 12% of its forests annually.

Figure 21 - Wood utilised for food processing



Continued operation of the solar PV systems

The PV systems' design did not foresee much future growth in energy demand. As a rule of thumb, a 20% increase should have been factored into the feasibility study and subsequent specifications. It could be that the budget available dictated the scheme sizes rather than the potential demand (e.g. in Bo TERI's Nov 2011 study indicated a total capacity requirement of 40 kW and 156 kWh per day. With only 25 kWp installed, a back-up generator will be required, yet was not provided by UNIDO).

To fully support the future development of metalworking and carpentry, a larger generator will be required at Bo and Pujehun, even with Bo on the grid, because it is not reliable enough to support full-time productive uses.

Refrigeration remains a key requirement to boosting food security, and plans should continue for this as part of the electrification. GC management have further recognised that electricity has extra revenue-generating potential e.g. in internet cafe, DSTV and photocopying facilities. They need to be aware also of the servicing and maintenance needs of the (complex) solar system, which was mentioned as a concern by the trainers.

Impact (potential)

It was too early to make a proper assessment of impact (enhanced resilience to external shocks), which requires an ex-post evaluation. Interviews with central and local authorities, the GC managers, the trainers and the trainees confirmed that provision of training to people within vulnerable communities does actually contribute to their livelihood and its reintegration in the community.

However, the evaluation team was able to observe some early signs for potential impact. All stakeholders were appreciative of the visible developments brought by UNIDO's interventions, e.g. construction and updating of infrastructure, solar PV systems, processing machinery, enterprise equipment, as well as capacity building initiatives.

The trainings have led to diversification of economic activities in targeted communities. Some trainees have lost members of their families during the civil conflict, and the trainings help them re-integrate into the community, earn money and support themselves and their family. The GCs bring many local actors together and have a community feel to them. The planned internet centre and the DSTV (satellite TV) at Bo are appreciated, and one visiting journalist referred to DSTV as a medicine to reduce people's stress and create a sense of belonging.

4.9 Cross-cutting issues

Gender equality

The project aimed to promote gender equality. Female trainees were encouraged to take part in non-traditional disciplines such as tailoring and auto-mechanics, and the solar PV plants in Pujehun and Kpandebu both had women technicians (see figure 22 below). It was reported that training female trainees in non-traditional disciplines has improved their position in the community.

**Figure 22 -
Woman PV technician
in Kpandebu**



**Figure 23 -
Women empowerment
in Kailahun**



Some of the training activities had generated employment and income-earning opportunities, notably as seen in the gara tie-dye meeting in Kailahun (Figure 23), with women empowerment mentioned as resulting from having the trainings.

Support had been given to disabled people and those maimed in the conflicts, particularly for blacksmithing and weaving activities and disabled persons were seen enrolled in trainings.

However, the share of female beneficiaries of the project was lower than males, and gender equality potential of the project was not fully reached. A Kindergarten promised by the management of the GC for Bo to assist women trainers/trainees was not realised.

South-South Cooperation

South-South Co-operation (SSC) was evident in various trainings. ToT in neighbouring Guinea as well as training of the Liberian solar PV trainees in Sierra Leone under a sister programme were examples of SSC. Moreover, international consultants from Benin, Ghana, Mali and Uganda had been sharing experience and knowledge from the wider region on a broad range of disciplines (e.g. use of grating and milling machines, entrepreneurship etc).

Table 8 - Analysis of the LogFrame for effectiveness

| | Description | Indicators as per the LogFrame | Status |
|---------------------------------------|---|---|---|
| Development goal/ Impact | Local communities in Koindu, Kpandebu, Bo and Pujehun are more resilient to shocks, through improved entrepreneurial, leadership and management skills for youth and improved capacities to undertake diversified income-generation activities | <ul style="list-style-type: none"> Improved levels of income for both men and women youth Increased employment for both men and women youth More diverse sources of income including from non-farm sources | <ul style="list-style-type: none"> It is difficult to assess likelihood of employment or improvement of levels of income of the male and female trainees. However, the evaluation team found some facts that indicate increased employment rates and improved levels of income amongst the beneficiaries in the future In the absence of a baseline study or up-to-date data on the forms of employment in the area of intervention, it is difficult to assess if the project, considering its limited scope, did broaden the source of income for the local community |
| Outcomes/ Immediate Objectives | <ul style="list-style-type: none"> The Growth Centres in Koindu, Kpandebu, Bo and Pujehun use the new equipments, infrastructure and training to expand and improve the quality of their commercial operations in processing local agricultural produce Young men and women in the communities of Koindu, Kpandebu, Bo and Pujehun have improved their capabilities in agro-processing, agriculture, entrepreneurship, computer literacy and Internet communication | <ul style="list-style-type: none"> Each GC has expanded the volume of production by 10 per cent within one year of project completion Revenues of GC have increased by 10 per cent within one year of project completion Profit of each GC has increased by at least 10 per cent within one year of project completion At least 60 per cent of youths complete full training and receive certificates within one year of project completion | <ul style="list-style-type: none"> As the LogFrame indicates that the production volume of the GCs, their revenues as well as their profits will increase by 10 per cent within one year of project completion, it was therefore not possible to assess these outcomes in the course of a final evaluation However, with the current status of GC, it seems unlikely that they would achieve the 10 per cent increase in production, revenues and profits The last outcome of the intervention is assessed as achieved, as most trainees that completed their trainings were seen to receive their certificates. |

| | Description | Indicators as per the LogFrame | Status |
|-----------------|---|---|--|
| Output 1 | Renovated GC premises have <ul style="list-style-type: none"> Expanded agro-processing capacities; Facilities for collective purchasing of inputs and for collective marketing of products; Capacities to run production-cum-training programmes for local youth | <ul style="list-style-type: none"> Each GC premises is in good working order at time of project completion All purchased equipment is functional up to one year after project completion Training programmes are delivered to specifications | <ul style="list-style-type: none"> With the exception of Bo GC, which was rebuilt under the project, the upgrading and renovation activities in other GCs were limited to some construction work related to the PV system. As observed by the evaluation team, not all equipment was purchased and delivered. In Bo GC the trainings had to be conducted using old furniture and equipment. Only in Koindu and Kailahun was there evidence of equipment provided. With regard to training programme, the evaluation team assessed that the training programmes are delivered to specifications. |
| Output 2 | GC have reliable access to low-cost, environmentally-friendly energy for running operations and for providing energy services to local communities | <ul style="list-style-type: none"> All purchased equipment is functional up to one year after project completion At least one local person per GC has completed training in use and maintenance of the PV solar system | <ul style="list-style-type: none"> Output 2 cannot be fully assessed, as at the time of the evaluation a major part of equipment was yet to be delivered, however the prospect is that the solar PV will operate to a high quality. As assessed by the renewable energy expert, more than one member of local community has been trained in use and maintenance of the PV solar system. |
| Output 3 | GC managers have improved management capabilities for the operation of the Centres | <ul style="list-style-type: none"> All three GC managers are leading youth training programmes All three GC managers have completed training in use and maintenance of the PV solar system | <ul style="list-style-type: none"> GC managers would have gained improved capabilities through exposure to and organising the UNIDO interventions. There was no evidence of a completed solar PV maintenance training at the site completed (Bo) as managers did not understand that the use of the air-conditioning was not permitted on the solar batteries. |
| Output 4 | Youth, men and women, have received training for improved skills in: <ul style="list-style-type: none"> Technical aspects of agro-processing operations; Business skills for running commercial agro-processing operations. | <ul style="list-style-type: none"> At least 50 youths complete training programmes and are certified within six months of project completion At least 30 per cent of trainees attracted are women | <ul style="list-style-type: none"> Surveys and questionnaires were completed by the evaluation team to check the numbers in trainings and proportion of women. Training in agro-processing will depend on the completion of the construction and installation of equipment and the energy system to power these. |

Table 9 - Assessment of project activities by rank and output

| Activity Grouping | Activities | Rank (1-5) | Assessment (Red-Amber-Green) |
|--|---|------------|------------------------------|
| Renovation (Note: only undertaken for Bo, little renovation seen in Kpandebu and none in Pujehun) | 1) Architect to produce blue prints, Bill of Quantities (BOQ) and renovation work plan for Kpandebu, Bo and Pujehun | 4 | Green |
| | 2) Recruit a Site Manager for renovation | 4 | Green |
| | 3) Recruit construction trainers for Kpandebu, Bo and Pujehun | 4 | Green |
| | 4) Recruit construction/training programme trainees from Kpandebu, Bo and Pujehun communities | 4 | Green |
| | 5) Purchase construction skills training materials based on the BOQs | 2 | Amber |
| | 6) Conduct construction/training programme for the renovation of Growth Centres in Kpandebu, Bo and Pujehun, and issue training certificates to the trainees | 5 | Amber |
| Photovoltaic solar energy | 7) Prepare technical specifications for the photovoltaic energy system for Kpandebu, Bo and Pujehun and identify suppliers | 3 | Green |
| | 8) Obtain proform invoices, select a supplier and place order for the PV energy system equipment | 3 | Green |
| | 9) Purchase and delivery of the photovoltaic energy system equipment | 3 | Green |
| | 10) Install and test photovoltaic solar energy system in Kpandebu, Bo and Pujehun | 4 | Green |
| | 11) Train the Growth Centre staff in maintenance and use of the photovoltaic solar energy system | 5 | Green |
| | 12) Purchase and install computers, TV etc. for Growth Centres in Kpandebu, Bo and Pujehun | 2 | Green |
| Repair, replace and install food processing equipment | 13) Prepare technical specifications for replacing and repairing food processing equipment for Kpandebu and Pujehun, brick making and metal work equipment for Bo, and identify suppliers | 1 | Amber |
| | 14) Obtain proforma invoices, select suppliers and place order for the food processing equipment, brick making and metal work equipment in consultation with Songhai Centre in Benin | 2 | Amber |
| | 15) Purchase food processing equipment, brick making and metal work equipment; | 3 | Red |
| | 16) Install and test food processing equipment, brick making and metal work equipment | 4 | Red |
| Establish legal status | 17) Recruit a lawyer | 3 | Green |
| | 18) Lawyer to carry out participatory consultations with Growth Centre Board members and managers, determine the most suitable legal status, list requirements, spell out all the steps to register, prepare manuals to operate according to the legal requirements | 4 | Amber |
| | 19) National Management Specialist to prepare syllabus to train the Growth Centre Board members and the managers in accordance with the manual prepared by the lawyer | 2 | Red |

| Activity Grouping | Activities | Rank (1-5) | Assessment (Red-Amber-Green) |
|--|---|------------|------------------------------|
| | 20) National Management Specialist to train the Growth Centre Board members and the managers | 1 | Amber |
| Develop marketing expertise | 21) National Marketing Specialist to develop marketing strategy in consultation with Growth Centre Board members and the managers | 3 | Amber |
| | 22) National Marketing Specialist to train and assist the Growth Centre Board members and managers in implementing competitive marketing of the products | 2 | Red |
| Develop entrepreneurship training capacity | 23) International Entrepreneurship Trainer and entrepreneurship trainer at Bo Growth Centre to develop a plan to introduce entrepreneurship training curriculum, adapt entrepreneurship curriculum syllabus, textbooks, training programme materials for in-service instructors | 2 | Amber |
| | 24) International Entrepreneurship Trainer to conduct training of trainers and in-service and pre-service instructors | 3 | Green |
| Improve life-skills training programme | 25) Purchase replacement equipment for life-skills training programme in Koindu | 5 | Amber |
| | 26) Prepare life-skills training programme for Kailahun in consultation with trainers | 2 | Green |
| | 27) Purchase training materials for Kailahun to support completion of unfinished life-skills training programme | 3 | Green |
| | 28) Conduct life-skills training programme in Kailahun, and issue training certificates | 5 | Amber |
| Consultation monitoring and Evaluation | 29) Conduct stakeholder's consultation meetings at each Growth Centre community, establish monitoring indicators and prepare work plan | 5 | Green |
| | 30) Prepare progress reports | 2 | Amber |
| | 31) Conduct coordination meetings | 2 | Green |
| | 32) Conduct evaluation | 3 | Green |
| | 33) Prepare project terminal report | 4 | Amber |
| | 34) Conduct end-of-project review workshops | 3 | Red |

| Totals | Count | Weight | Percentage of weighted |
|--------|-------|--------|------------------------|
| Green | 17 | 57 | 53% |
| Amber | 12 | 36 | 34% |
| Red | 5 | 14 | 13% |

5.

Recommendations and Lessons Learned

5.1 Recommendations

The following recommendations are based upon findings of the final evaluation, which in parts resemble those of three earlier evaluations:

Recommendations to UNIDO with regard to the intervention in Sierra Leone

- Similar future projects should provide trainees with food or wages for the duration of the training in order to reduce the rate of dropouts among the poorest trainees.
- Personal protective equipment should be provided for all UNIDO trainees.
- In order to enhance project efficiency, communication and information sharing among the project implementation team and the management of the GCs should be enhanced, e.g. the project document and lists of equipment need to be made available to the counterparts at the national and local level.
- The project should have local coordinators based in the field to ensure active, transparent and effective communication with the national counterpart and local partners.
- For effective monitoring and evaluation of the project and to strengthen the coordination of activities, similar future projects should establish a steering committee.
- The Growth Centres should focus on operating as self-sustaining units with sound business plans and clarity on asset ownership in order to reduce their dependence on external funding.
- To enhance their relevance, similar future interventions must establish a partnership with the Ministry of Agriculture, Forestry and Food Security, as this Ministry is the major national authority in charge with developing initiatives such as the Agricultural Business Centres (ABCs).

Recommendations to UNIDO with regard to post-crisis interventions

- Feasibility studies, needs and risk assessments as well as a carefully designed LogFrame are crucial to the success of post-crisis interventions, and should be undertaken in the course of project formulation or its inception phase.

- In post-crisis contexts, and to the extent practicable, project staff should be awarded adequate salaries and a degree of contractual security in order to help motivate and stabilise the project team.
- In order to facilitate project efficiency, the PM in HQ should avoid micro-level management, and to make greater use of the Chief Technical Advisor (CTA) in the field in day-to-day affairs. Emphasis should be on providing the project office with an annual work plan, and asking them to develop quarterly work plans with associated monthly progress reports.
- UNIDO should further implement its decentralisation plan in operations at the country level by devolving much decision-making, budget authority and procurement process to the field, to improve efficiency and enable fast-track procedures that are required in post-crisis situations.

5.2 Lessons Learned

In the course of the independent final evaluation a number of lessons and relevant questions have emerged, which can be of interest for the future interventions of UNIDO in Sierra Leone as well as elsewhere in post-crisis situations. It needs to be debated, for example, whether 1-year, short-term funding suits medium-term livelihood creation activities (where UNIDO has its comparative advantage) targeting youth in remote and vulnerable communities that have witnessed conflict and crisis.

- Basing a short-term post-crisis project on pre-existing national institutions enhances overall project effectiveness.
- In insecure, post-conflict settings where many people live hand-to-mouth and day-to-day for their basic necessities, providing wages and/or food have to be a part of the reconstruction or training work, particularly for the most vulnerable beneficiaries.
- In general, decentralisation in decision-making process, budget authority, and procurement procedures to the field would improve efficiency and timely delivery, as fast-track procedures are essential for successful interventions in post-crisis situations.

Annex 1 - Evaluation Terms of Reference

“Rehabilitation of training-cum-production centers in vulnerable communities of Koindu, Kpandebu and Pujehun in Sierra Leone ”

TF/SIR/11/002

Budget: \$ 2,000,000

Period covered: March 2011 – June 2012

1. Introduction

This evaluation TOR is part of (and an annex to) a wider thematic evaluation of UNIDO’s Japanese funded post-crisis interventions in 7 countries, launched in 2011 with a total budget of \$9.8 million. The evaluation was mandated by the decision of the Programme Approval and Monitoring Committee (AMC) meeting on 15 December 2010. What follows is the specific TOR for the project in Sierra Leone with a budget of \$ 2 million.

The evaluation is to be conducted during the final weeks of project implementation, in May/June 2012.

2. Project background and context

Sierra Leone had suffered a long lasting and devastating civil war, which caused the death of an estimated 50,000 of the population, displacement of another two million and destruction of almost 3000 towns and villages over a decade ago. Today, Sierra is determined to rebuild its human and physical capital, which is mirrored in the Government’s Agenda for Change.³³ However, the efforts of the Government are subjected to the grave challenge of youth unemployment and lack of resilience to natural shocks. The number of unemployed, underemployed young people was estimated by the UN as high as 800,000. These unemployed young men are susceptible to be recruited for the armed conflicts in neighboring countries, Natural crisis such as flooding disrupt not only development activities but also productive assets and infrastructure and challenges the Government’s efforts for development.

The origin of this project contained in the “Joint Vision of the UN Family for Sierra Leone” developed by the Government of Sierra Leone and the United Nations

³³ Fifth report of the Secretary-General on the United Nations Integrated Peace building Office in Sierra Leone, 17th September 2010, S/2010/471.

Integrated Peace building Office in Sierra Leone (UNIPSIL). The project was designed to enhance peace and security through improved entrepreneurial, leadership and management skills for youth and to improve capacities to undertake diversified income-generation activities in the vulnerable communities of Koindu, Kpandebu and Pujehun, which border Guinea and Liberia.

The project aimed at expanding existing Growth Centers, which will act as training-cum-production centers to provide services for agri-entrepreneurship development for rural young men and women in rural areas, and to develop commercially sustainable operations through valorization of agricultural products.

Due to lack of reliable energy sources in the targeted regions, the project envisaged the installing of a photovoltaic energy system at each Growth Centre. Details of the project results are given in the LogFrame attached under Annex 2 below.

The project was initially designed for a one year period, and extended to June 2012, and was implemented in collaboration with the Ministry of Trade and Industry of the Republic of Sierra Leone.

3. Rationale and purpose

The AMC decision of 15 December 2010 mandated the Evaluation Group of UNIDO to conduct an evaluation of projects in 7 countries receiving Japanese TF contributions for post-crisis interventions.

The main objective of the thematic evaluation is to contribute to UNIDO's institutional learning in short-term, post-crisis interventions, and is expected to contribute to:

- a. Learning lessons in Sierra Leone with a forward looking approach that can feed into future UNIDO cooperation with the Government; and
- b. Feeding into the wider thematic evaluation that seeks lessons and recommendations on UNIDO's post-crisis interventions.

The evaluation exercise will therefore help UNIDO shape its overall strategy in post-crisis settings, and to further identify UNIDO's specific role and added value in supporting crisis-affected countries make the transition from humanitarian assistance to early recovery, reconstruction, and sustainable development.

The report will therefore be of interest to concerned UNIDO staff at HQ and the field, as well as UNIDO's Somali and Japanese counterparts.

In order to meet tight deadlines before the project's formal closure, the evaluation must be launched as the earliest opportunity in May and completed by 30 June 2012.

The stakeholders will be consulted in Vienna and in the field as part of the evaluation exercise, and their comments and feedback will be sought as part of the report finalization process.

The evaluation will take full account of an earlier thematic evaluation of UNIDO's post-crisis interventions completed in 2010.

4. Scope and focus

The evaluation will be carried out in keeping with agreed evaluation standards and requirements. More specifically it will fully respect the principles laid down in the "UN Norms and Standards for Evaluation" and Evaluation Policies of UNIDO.³⁴

The evaluation will attempt to determine as systematically and objectively as possible the relevance, efficiency, achievements (outputs, prospects for achieving expected outcomes and impact) and sustainability of the project. To this end, the evaluation will assess the achievements of the project against its key objectives, as set out in the project document and the inception report, including re-examination of the relevance of the objectives and of the design. It will also identify factors that have facilitated or impeded the achievement of the objectives.

The evaluation will be carried out through analyses of various sources of information, including desk analysis, survey data, and interviews with counterparts, beneficiaries, partner agencies, donor representatives, programme managers and through the cross-validation of data.

The evaluation team will consist of a national consultant and two international evaluators working under the guidance of the UNIDO evaluation manager in EVA/ODG.

The consultants will be expected to visit the project sites and to conduct interviews with various stakeholders in the field before the end of June 2012.

The evaluation will span the entire project process from the beginning to the present, but will be limited in focus to major project activities and results given the time constraints. The evaluation will cover all specific geographic areas covered by the project, and assess the entire results chain, but will focus more specifically on outputs and planned outcomes, and also the likelihood of achieving planned impacts despite the short duration of the project. The evaluation will take full account of a previous thematic evaluation on UNIDO's post-crisis interventions conducted in 2009, analyze the implementation of its recommendations, and suggest any adjustments based on factual findings and emerging lessons identified.

³⁴ All documents available from the websites of the UN Evaluation Group: <http://www.uneval.org/>

5. Evaluation issues and key evaluation questions

While maintaining independence, the evaluation will be carried out based on a participatory approach, which seeks the views and assessments of all parties. It will address the following issues (within the context of a quick impact 12 month project cycle):

Project identification and formulation

- The extent to which a participatory project identification process was applied in selecting problem areas and counterparts requiring technical cooperation support;
- The extent to which lessons from earlier UNIDO projects in Sierra Leone were taken on board in the formulation process including lessons and recommendations given on existing evaluation reports at the time;
- Relevance of the project to Sierra Leon's crisis-to-development transition priorities and needs;
- Clarity and realism of the project's broader and immediate objectives, including specification of targets and identification of beneficiaries and prospects for sustainability.
- Clarity and logical consistency between, inputs, activities, outputs and progress towards achievement of objectives (quality, quantity and time-frame);
- Realism and clarity in the specification of prior obligations and prerequisites (assumptions and risks);
- Realism and clarity of external institutional relationships, and in the managerial and institutional as well as security framework for implementation and the work plan;
- Likely cost-effectiveness of the project design.

Project ownership

- The manner in which beneficiaries were selected, and the extent to which the project was formulated in terms of participation of the national counterparts and/or target beneficiaries;
- Whether the counterparts have been appropriately involved and were participating in the identification of their critical problem areas and in the development of technical cooperation strategies and are actively supporting the implementation of the project approach
- Counterpart contributions and other inputs have been received from the Government (including at the local level) as compared to the project document work plan.

Project coordination and management

- The extent to which the national management and overall field coordination mechanisms of the project have been efficient and effective;
- An assessment of crisis context-specific measures devised and put in place by UNIDO and the project managers, and related recommendations and lessons;
- The UNIDO-based management, coordination, quality control and input delivery mechanisms have been efficient and effective;
- Monitoring and self-evaluation has been carried out effectively, based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management;
- Changes in planning documents during implementation have been approved and documented;
- Coordination envisaged with any other development cooperation programmes in the country has been realized and benefits achieved.
- Synergy benefits can be found in relation to other UNIDO and UN activities in the country.
- The effect of and lessons from the institutional set-up on project implementation.

Efficiency of Implementation

Efficiency and adequacy of project implementation including: availability of funds as compared with budgetary inputs by both the donor and national component; the quality and timeliness of input delivery by both UNIDO (expertise, training, equipment, methodologies, etc.) and the Government as compared to the work plan(s); managerial and work efficiency; implementation difficulties; adequacy of monitoring and reporting; the extent of national support and commitment and the quality and quantity of administrative and technical support by UNIDO.

Assessment of whether the project approach represented the best use of given resources for achieving the planned objectives.

Effectiveness and Project Results

The evaluation will include a full and systematic assessment of outcomes and outputs produced to date (quantity and quality as compared with work plan and progress towards achieving the immediate objectives).

This includes the relevance of the outputs produced and how the target beneficiaries use the outputs, with particular attention to gender aspects as well as capacity development plans and outcomes; as part of the outcomes, which have occurred or which are likely to happen through utilization of outputs.

The evaluation will also assess the contribution of the project to enhancing local community resilience, recovery and peace building efforts in targeted regions.

Prospects for achieving the expected impact and sustainability

Prospects for achieving the desired outcomes and impact and prospects for sustaining the project's results by the beneficiaries and the host institutions after the termination of the project, and identification of developmental changes (economic, environmental, social and institutional) that are likely to occur as a result of the intervention, and how far they are sustainable. This, inter alia, should include an assessment of local commitment at various levels to resource allocation for scaling up similar interventions, and an analysis of the impact of the project – and how these relate to and build on earlier UNIDO projects - in Sierra Leone.

The likely impact that the project will have on the beneficiaries (the young men and women in the communities) and the development of targeted infrastructure and training.

Recommendations

Based on the above analysis the evaluation team will draw attention to any lessons of general interest in post-crisis settings, and in relation to the design and orientation of the aforementioned, planned thematic evaluation.

6. Special considerations

Due to strong time constraints for this exercise, the evaluators will concentrate on the core issues of interest rather than details of activities, and will receive proactive support from the project management team (UNIDO HQ and field) and the Evaluation Group (HQ) throughout the exercise.

This will ensure that all key substantive issues will be identified in a participative manner at the start of the exercise (mission to Vienna), that the project management team will provide solid logistical and administrative support for the field mission expected during the latter part of March.

The evaluators will use a mix of document reviews, interviews, field visits and any local surveys needed for verifying relevant facts. The approach will be a forward looking one with a close eye on the thematic evaluation.

7. Time schedule and deliverables/outputs

The evaluation is scheduled to be launched and completed as early as possible in May 2012, and the first draft report is to be completed towards the end of June. A team of 3 consultants – two international and one national - will be recruited for the purpose (see Annex 3 for job descriptions) working under the overall supervision and guidance of the UNIDO ODG/EVA evaluation manager.

Table 1 - Draft Timetable (proposed start date: May 11th)

| Activity | Work days (Two International evaluators) | Work days (National Evaluator) | Deliverable |
|--|---|---|---|
| Desk study of project documents & relevant reports on the context | 2 | 2 | Inception report - Methodology, questionnaires and mission plan completed |
| Design a suitable initial evaluation methodology including a detailed field assessment plan – draft inception report | 1 | 1 | |
| Finalise mission plan and appointments and ensure logistical support in place | 1 | 3 | |
| Visit Vienna for preparatory meetings | 2 | 0 | |
| Conduct field assessment | 14 | 14 | Presentation on preliminary findings |
| Detailed analysis of assessment results and follow-up surveys | 2 | 2 | |
| presentation of preliminary findings in Vienna & further consultations | 3 | 0 | |
| Preparation of first draft evaluation report & submission for UNIDO feedback | 8 | 8 | First draft Report |

| | | | |
|--|-----------|-----------|---------------------|
| Prepare second draft & submit to Evaluation Group to circulate report among stakeholders for factual verification & feedback | 2 | 1 | Second draft Report |
| Finalization of report upon receipt of stakeholders' feedback and final presentation in Vienna | 1 | 0 | Final draft Report |
| Total | 36 | 31 | |

8. Consultations

The mission will maintain close liaison with the representatives of other UN agencies, UNIDO and the concerned national agencies, as well as with national and international project staff. Although the mission should feel free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitments on behalf of the Government, the donor, or UNIDO.

9. Deliverables

All following deliverables are expected in electronic format:

1. Final evaluation report;
2. Initial and final survey reports;
3. Draft evaluation report;
4. HQ and field presentations;
5. Draft survey questionnaire(s);
6. Copies of all completed survey questionnaires;
7. Inception report.

The evaluation report must follow the structure given in the annexes.

Draft reports submitted to UNIDO Evaluation Group are shared with the corresponding Programme or Project Officer(s) for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report. One copy of all survey interview reports and a copy of all completed survey questionnaires must also be shared with UNIDO.

The evaluation will be subject to quality assessments by UNIDO Evaluation Group. These apply evaluation quality assessment criteria and are used as a tool for providing structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality.

Annex: Job descriptions for the evaluation team

A. Two International Consultants 11-00

| | |
|-----------------------|---|
| Project title: | Rehabilitation of training-cum-production centres in vulnerable communities of Koindu, Kpandebu and Pujehun in Sierra Leone |
| Project No. | TF/SIL/11/002 |
| Post Title: | International Project Evaluator |
| Duration: | 36 Days over 7 weeks |
| Date required: | 11 May – 30 June 2012 |
| Duty station: | Vienna, Nairobi and Somaliland, plus local travel |
| Counterpart: | Ministry of Trade and Industry |

Duties: In accordance with the AMC decision of 15 December 2010, a final evaluation has to be undertaken by an independent consultant in accordance with the project evaluation TOR. The main objective of the final evaluation is to make an overall assessment of the effectiveness and efficiency with which the project has been implemented and, in particular, to provide a detailed assessment of the achievements made and overall results obtained. The evaluation shall specifically focus on comparing the actual outputs and outcomes of the project with the ones originally planned in the project document. This project has also an energy component, which will be evaluated by a second international evaluator specialised in energy projects. The two consultants will work closely with the project staff, supported by a national consultant, and will report to the Evaluation Manager at ODG/EVA.

In particular the Consultant will:

| Activity | Work days (International evaluators) | Deliverable |
|--|---|---|
| Desk study of project documents & relevant reports on the context | 1 | Inception report - Methodology, questionnaires and mission plan completed |
| Design a suitable initial evaluation methodology including a detailed field assessment plan – draft inception report | 1 | |
| Finalise mission plan and appointments and ensure logistical support in place | 1 | |
| Visit Vienna for preparatory meetings | 3 | |
| Conduct field assessment | 14 | Presentation on preliminary findings |
| Detailed analysis of assessment results and follow-up surveys | 2 | |
| Presentation of preliminary findings in Vienna & further consultations | 3 | |

| Activity | Work days (International evaluators) | Deliverable |
|--|--|---------------------|
| Preparation of first draft evaluation report & submission for UNIDO feedback | 8 | First draft Report |
| Prepare second draft & submit to Evaluation Group to circulate report among stakeholders for factual verification & feedback | 2 | Second draft Report |
| Finalization of report upon receipt of stakeholders' feedback and final presentation in Vienna | 1 | Final draft Report |
| Total | 36 | |

Qualification

- Extensive knowledge and experience in livelihoods project formulation and management in post-crisis contexts;
- Extensive knowledge and experience in formulation of projects in the area of sustainable energy and cleaner production and management in post-crisis contexts;
- Proven track record in evaluation of UN-projects;
- Good quality report writing skills;
- Postgraduate degree in social sciences, engineering or a related field.

The evaluation approach and other details are given in the project evaluation TOR.

A. National Consultant 17-54

| | |
|-----------------------|---|
| Project title: | Rehabilitation of training-cum-production centres in vulnerable communities of Koindu, Kpandebu and Pujehun in Sierra Leone |
| Project No. | TF/SOM/11/001 |
| Post Title: | Project Evaluator |
| Duration: | 31 working days over 7 weeks |
| Date required: | 11 May – 30 June 2012 |
| Duty station: | Sierra Leone plus local travel |
| Counterpart: | Ministry of Trade and Industry |

Duties: In accordance with the AMC decision of 15 December 2010, a final evaluation has to be undertaken by an independent consultant in accordance with the project evaluation TOR. The main objective of the final evaluation is to make an overall assessment of the effectiveness and efficiency with which the project has been implemented and, in particular, to provide a detailed assessment of the achievements made and overall results obtained. The evaluation shall specifically focus on comparing the actual outputs and outcomes of the project with the ones originally planned in the project document. The consultant will work closely with and report to an international consultant to be recruited by the UNIDO Evaluation Manager at ODG/EVA, and will work under the latter's overall supervision and guidance.

In particular the Consultant will:

| Activity | Work days (National Evaluator) | Deliverable |
|--|--------------------------------------|---|
| Desk study of project documents & relevant reports on the context | 2 | Inception report - Methodology, questionnaires and mission plan completed |
| Design a suitable initial evaluation methodology including a detailed field assessment plan – draft inception report | 1 | |
| Finalise mission plan and appointments and ensure logistical support in place | 3 | |
| Conduct field assessment | 14 | Presentation on preliminary findings |
| Detailed analysis of assessment results and follow-up surveys | 2 | |
| Preparation of first draft evaluation report & submission for UNIDO feedback | 8 | First draft Report |
| Prepare second draft & submit to Evaluation Group to circulate report among stakeholders for factual verification & feedback | 1 | Second draft Report |
| Total | 31 | |

Qualification

- Sierra Leone national with extensive knowledge of the Koindu, Kpandebu and Pujehun.
- Good knowledge and experience in livelihoods project management, formulation and/or evaluation.
- Experience in evaluation of UN projects.

The evaluation approach and other details are given in the project evaluation TOR.

Annex 2: Log Frame

| | Intervention logic | Objectively verifiable indicators | Sources of verification | Assumptions |
|--------------------------------------|---|---|---|---|
| Development goal/impact | Local communities in Koindu, Kpandebu, Bo and Pujehun are more resilient to shocks, through improved entrepreneurial, leadership and management skills for youth and improved capacities to undertake diversified income-generation activities | <ul style="list-style-type: none"> Improved levels of income for both men and women youth Increased employment for both men and women youth More diverse sources of income including from non-farm sources | National agricultural statistics National industrial statistics Monthly reports from the Growth Centres | Programme counterparts remain committed; stable economic and political environment |
| Outcomes/immediate objectives | <ul style="list-style-type: none"> The Growth Centres in Koindu, Kpandebu, Bo and Pujehun use the new equipments, infrastructure and training to expand and improve the quality of their commercial operations in processing local agricultural produce Young men and women in the communities of Koindu, Kpandebu, Bo and Pujehun have improved their capabilities in agro-processing, agriculture, entrepreneurship, computer literacy and Internet communication | <ul style="list-style-type: none"> Each GC has expanded the volume of production by 10 per cent within one year of project completion Revenues of GC have increased by 10 per cent within one year of project completion Profit of each GC has increased by at least 10 per cent within one year of project completion At least 60 per cent of youths complete full training and receive certificates within one year of project completion | Project M&E reports Monthly reports from the GCs Annual reports of GC | Management of Growth Centres is committed and takes ownership of the project activities The construction and installation of equipment is not delayed. Any delay in these activities would reduce the duration available during the project period for training to take place. Selection of competent project leadership and team members would prevent such risks |
| Output 1 | Renovated GC premises have <ul style="list-style-type: none"> expanded agro-processing capacities; facilities for collective purchasing of inputs and for collective marketing of products; capacities to run production-cum-training programmes for local youth | <ul style="list-style-type: none"> Each GC premises is in good working order at time of project completion All purchased equipment is functional up to one year after project completion Training programmes are delivered to specifications | Annual reports of GCs Project progress reports | The construction work needs to be completed before the onset of the rainy season (in May); otherwise the work will need to wait until September when the rain stops. The start-up period of the project is crucial. The project plans to mitigate the risk by identifying a strong team leader before starting the project. |
| Activities | 1.1 Prepare Bill of Quantities (BOQ) for the construction work; 1.2 Purchase materials; 1.3 Recruit site supervisor, construction supervisor and technicians 1.4 Prepare blueprint for the renovation and | | | Adequate access to necessary infrastructure including water and transport |

| | Intervention logic | Objectively verifiable indicators | Sources of verification | Assumptions |
|-------------------|--|--|--|--|
| | <p>expansion of already existing premises for;</p> <p>1.5 Recruit the local youth for the construction skill training;</p> <p>1.6 Carry out construction-cum-training programme;</p> <p>1.7 Prepare technical specifications on food processing equipment in consultation with Songhai Centre in Benin that is the centre of excellence in the region for agro-processing;</p> <p>1.8 Obtain proforma invoices from Songhai Centre in Benin.</p> | | | |
| Output 2 | GC have reliable access to low-cost, environmentally-friendly energy for running operations and for providing energy services to local communities | <ul style="list-style-type: none"> All purchased equipment is functional up to one year after project completion At least one local person per GC has completed training in use and maintenance of the PV solar system | <p>Annual reports of GCs</p> <p>Project progress reports</p> | <p>The system should be installed before the onset of the rainy season (in May); otherwise the work will need to wait until September. The project plans to mitigate the risk by drawing on previous experience in purchasing and installing such a system at another Growth Centre in a previous project.</p> |
| Activities | <p>2.1 Prepare technical specifications for the photovoltaic energy system;</p> <p>2.2 Purchase the equipment;</p> <p>2.3 Install the equipment;</p> <p>2.4 Conduct training in use and maintenance of the system</p> | | | |
| Output 3 | GC managers have improved management capabilities for the operation of the Centres | <ul style="list-style-type: none"> All three GC managers are leading youth training programmes All three GC managers have completed training in use and maintenance of the PV solar system | <p>Annual reports of GCs</p> <p>Project progress reports</p> | |
| Activities | <p>3.1 The legal status of the Centre is clarified in conjunction with the managers and Board</p> <p>3.2 Managers receive training and assistance in marketing expertise</p> <p>3.3 Managers receive training and assistance in entrepreneurship training</p> <p>3.4 GC managers learn-by-doing in leading training programmes of youth in agro-processing</p> <p>3.5 GC managers are trained in use and maintenance of the PV solar system</p> | | | |

| | Intervention logic | Objectively verifiable indicators | Sources of verification | Assumptions |
|-------------------|---|---|---|---|
| Output 4 | <p>Youth, men and women, have received training for improved skills in:</p> <ul style="list-style-type: none"> • technical aspects of agro-processing operations; • business skills for running commercial agro-processing operations. | <ul style="list-style-type: none"> • At least 50 youths complete training programmes and are certified within six months of project completion • At least 30 per cent of trainees attracted are women | <p>Annual reports of GCs Project progress reports</p> | <p>As noted above, training in agro-processing will depend on the completion of the construction and installation of equipment.</p> |
| Activities | <p>4.1 Develop selection criteria for trainees, with proactive approach to attracting women trainees</p> <p>4.2 Develop syllabus/training modules, including specific modules tailored for women trainees</p> <p>4.3 Conduct technical and business training</p> | | | |

Annex 3: List of people met

| Name | Position | Organisation |
|-----------------------------|------------------------------|------------------------------|
| Mr. Stephen Kargbo | Head of Unit | UNIDO Sierra Leone |
| Ms. Evelyn Alpha | National Project Coordinator | UNIDO Sierra Leone |
| Mr. Anthony Morsay | National Project Assistant | UNIDO Sierra Leone |
| Mrs. Aureola Cole | Project Administrator | UNIDO Sierra Leone |
| Mr. Amidu Yoynoi | Security Advisor | UNISSO |
| Rev. Emmanuel Koroma | Technical Group | Njala University |
| Dr. Richard Conteh | Minister | Ministry of Trade & Industry |
| Mr. Bob Conteh | Dean | Njala University |
| Dr. Richard Senase | Director of Social Science | Njala University |
| Mr. Kai Tebbie | Paramount Chief | Bo |
| Mr. Albert Lebbie | Board Chairman | Bo Growth Centre |
| Mr. Abdulei S. Kamara | Centre Manager | Bo Growth Centre |
| Mr. Henry Tucker | Board Member | Bo Growth Centre |
| Mr. Mohammed M. Mansaray | Board Member | Bo Growth Centre |
| Mr. William Charles Senesie | Board Member | Bo Growth Centre |
| Mr. Mohammed Fullah | Construction Manager | Bo Growth Centre |
| Ms. Deborah Mehemon | Tailoring Trainer | Bo Growth Centre |
| Mr. Bokrie Ngeyao | Tailoring Trainer | Bo Growth Centre |
| Ms. Hawa Fatorma | Project Officer | Finnish Refugee Council |
| Mr. Solomon Massaquoi | Centre Manager | Pujehun Growth Centre |
| Mr. Timothy Manswaray | Manager (Solar PV) | Pujehun Growth Centre |
| Mr. Augustine Alie | Foreman (Solar PV) | Pujehun Growth Centre |
| Mr. JS Koroma | Board Member | Pujehun Growth Centre |
| Mr. Kele Masaricar | Paramount Chief | Pujehun |
| Mr. Mohammed Gibo Massaquoi | Solar PV trainee | Pujehun Growth Centre |
| Ms. Zainab Coker | Solar PV trainee | Pujehun Growth Centre |
| Mr. Gbassay Rogers | Solar PV trainee | Pujehun Growth Centre |
| Mr. Anthony Watkins | PV Installation Engineer | Sublabob |

| Name | Position | Organisation |
|-----------------------|---------------------------------------|------------------------|
| | | (Solar Company) |
| Mr. Joe Pyne | Deputy Mayor | Bo City Council |
| Mr. Umaru Sannoh | Internal Auditor | Bo City Council |
| Mr. Momoh Bokarie | Centre Manager | Kpandebu Growth Centre |
| Mr. Fawari | Paramount Chief | Kpandebu |
| Mr. Halagui Kamara | Chief | Kpandebu |
| Mr. Foad FM Denby | Board Member | Kpandebu Growth Centre |
| Mr. Oren James | Centre Manager | Koindu Growth Centre |
| Mr. Moses Foryoh | Secretary | Koindu Growth Centre |
| Mr. Denis Nyuma | Tailoring Trainer | Koindu Growth Centre |
| Mrs. Mary Sesay | Gara tie-dye Trainer | Koindu Growth Centre |
| Ms. Margaret James | Soap making Trainer | Koindu Growth Centre |
| Ms. Sata Kendema | Soap making Trainee | Koindu Growth Centre |
| Mr. Tamba Lahai | Blacksmithing Trainer | Koindu Growth Centre |
| Mr. Tamba Focko | Weaving Trainer | Koindu Growth Centre |
| Mr. Faiya Morie | Motorbike repair Trainer | Koindu Growth Centre |
| Mr. Kele Mansaray | Solar PV Specialist | UNIDO |
| Ms. Mami Dambu | Gara tie-dye Trainer | Kailahun |
| Mr. Umaru Aruna | Blacksmithing Trainer | Kailahun |
| Mr. Kammeh Mohammed | Welding Trainer | Kailahun |
| Mr. Abu Bangura | Carpentry Trainer | Kailahun |
| Mr. Nelson Lahai | Deputy Mayor | Kailahun City Council |
| Mr. Samuka Kamara | Project Liaison Officer | Kailahun City Council |
| Ms. Jeneba Nyabeh | Hairdressing Trainer | Kailahun |
| Mr. Augustine Sandifo | Auto-mechanics Trainer | Kailahun |
| Mr. Sei Hisakawa | Senior Industrial development officer | UNIDO HQ |

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Rehabilitation of training Cum Production in vulnerable communities of Koindu, Kpandebu and Pujehun Sierra Leone

Joint vision for Sierra Leone of the UN family

Sierra Leone Integrated Programme evaluation report (2008)

Annex 5: Survey questionnaires

Questionnaires for trainees of the UNIDO growth centres

A. Interviewee and Interviewer Profile:

| Trainee signature: | Interviewer: | Date: |
|--------------------|--------------|-------|
| | | |

| Information about You | |
|--|--|
| 1. | How old are you? |
| 2. | Are you male or female? Male <input type="checkbox"/> Female <input type="checkbox"/> |
| 3. | Where did you attend the Training? |
| 4. | Level of education <ul style="list-style-type: none"> <input type="checkbox"/> No formal education <input type="checkbox"/> Primary School (3 - 6 years) <input type="checkbox"/> Intermediate (7 - 9 years) <input type="checkbox"/> Secondary School (12 years) <input type="checkbox"/> Post-Secondary Education <input type="checkbox"/> Vocational or other training? |
| About Your Situation before the UNIDO Training | |
| 5. | Did you take any training before the UNIDO training? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| 6. | If yes, in which area? |
| About Your Experience with the Training | |
| 7. | What motivated you to take the training? |
| 8. | How did you become aware of the training? |
| 9. | What course did you take? <ul style="list-style-type: none"> a) Basic training b) Entrepreneurship (e.g. marketing) <input type="checkbox"/> c) Gender equality <input type="checkbox"/> |

| | | | |
|--|--------------------------|--|---|
| 10. Were you satisfied with the ability of your trainers? | | | |
| 11. Were you satisfied with the course you took PLEASE ONLY TICK THE BOXES FOR THE COURSE YOU ACTUALLY TOOK | | | |
| | Very Satisfied | Satisfied | Not Satisfied |
| Basic training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Entrepreneurship (e.g. marketing) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gender Equality | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Did you create your business with the skills you learned in the training? Explain. | | | |
| 13. When you completed the course, did you believe that you had the skills needed to find work? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 14. Did you receive the expected Qualification Certificate for the training? If not, why? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| About Your Situation after the Training | | | |
| 15. Are there jobs or income earning opportunities where you live for the skills that you learned during the course? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 16. Have you found employment using the skills you learned during the training? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 17. Has the training improved the quality of the skills that you learned during the course? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 18. Have you been able to create your business using the skills you learned during the training? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 19. Did you receive a tool kit from UNIDO? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 20. If you received a tool kit, what do you think of the quality of the toolkit? | | Good quality <input type="checkbox"/> | Medium quality <input type="checkbox"/> |
| | | Poor quality <input type="checkbox"/> | |
| 21. How useful do you think the toolkit is to your current job? | | Very useful <input type="checkbox"/> | Partially useful <input type="checkbox"/> |
| | | Not useful at all <input type="checkbox"/> | |
| 22. Did your income increase because of the course | | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

| | |
|-------------------------------------|---|
| 23. If yes, by about how much more? | -----0-25% more than before -----25- 50% more than before -----51-75% more than before -----76-100% more than before |
| | |

Notes:

Annex 6: Points raised by previous evaluations

Evaluation of Sierra Leone Integrated Programme (2008)

This previous evaluation has been analysed because two of the Growth Centres visited at that time are part of the recent post-conflict programme (at Pujehun and Kpandebu - the Growth centre at Binkolo was also evaluated in 2008). The main points gathered from the evaluation report are summarised in the following table:

Table 2 - Main points from Sierra Leone IP evaluation

| Evaluation point | Observations |
|------------------|--|
| Effectiveness | <ul style="list-style-type: none"> • Private contractors were not often suitable for the tasks and UNIDO's agreed level of deposit (10%) seen as too low. • GCs had no electricity, so UNIDO had to provide diesel generators. • UNIDO did not provide a vehicle for the projects. • Food processors need access to credit. • No MoU was drawn up between the project partners to clarify their responsibilities, the ownership of land & buildings not clear and the GC have no legal status. • The training opportunities and numbers of people in training were limited (need more than 100 trainees per year). • Not certain whether the GC model can be expanded, with uncertain economic and employment benefits. • The interventions were demand-oriented and the PSD aspect absent, for example no entrepreneurship development. |
| Efficiency | <ul style="list-style-type: none"> • Long delays (2 years +) to deliver the planned outputs; the projects' seed money was approved 2004 yet 4 years later much of the construction work was not finished. • First payment to contractors given April 2007 and work commenced with aim to finish by July 2007, but the election ban on works then came in between July - September 2007. • IP management and co-ordination too diluted and a lack of staff at MoTI to help implementation. • Poor reporting by UNIDO; 100% in 2005, 78% in 2006, 40% in 2007. • Lack of link between tools for blacksmithing and food processing; e.g. better agricultural productivity combined with good processing minimises postharvest |

| Evaluation point | Observations |
|------------------|---|
| | losses which has poverty reduction potential. |
| Sustainability | <ul style="list-style-type: none"> • Technical and financial sustainability uncertain. • GCs have to move to operate as self-sustaining and profitable units, not dependent on outside funding. • Many of the activities were on rehabilitation, and there was a lack of capacity development. • Baselines need to be developed by UNIDO and MoTI to assess sustainability issues (as well as efficiency, effectiveness and relevance points). • Need business plan for the GCs, reviewed annually. |
| Recommendations | <ul style="list-style-type: none"> • Analyse whether the GC concept is the correct one to promote rural employment in a post-conflict situation. • A Steering Committee should have been set up for the IP. • The outcomes and impacts should be monitored to feed back to MoTI for scaling up the GC plan. • A formal link should be made to the Mano Youth Programme. • Feasibility studies and risk analysis should be done for UNIDO interventions. • UNIDO's approach to projects in post-conflict areas needs to be reviewed. |

Thematic Evaluation of Post-crisis Projects (2010)

The following points have been noted as relevant to the post-crisis activities in Sierra Leone (and Liberia) that are currently under evaluation:

Table 2 - Main points from the post-crisis evaluation (2010)

| Evaluation point | Observations |
|------------------|---|
| General | <ul style="list-style-type: none"> • 5 out of 10 of the evaluated countries included Vocational Training Centre (VTC) or Growth Centre (GC) projects, similar to those in Sierra Leone and Liberia. • Projects were also short-term with the potential for medium-term interventions untapped. • Project durations of 12 months for the Mano River countries (Ivory Coast, Guinea, Sierra Leone, and Liberia) are far too short for ambitious multi-stakeholder programme with multiple inputs and in all cases projects were also extended by 6 months. • Construction of the GCs in Sierra Leone experienced delays and a change of team leader affected internal efficiency. • The parallel approach (facilities rehabilitated and trainings conducted together) is relevant to the post-crisis situation. • UNIDO has comparative advantage to GC work in post-conflict situations due to the industrial development and adding value to agri-products. • Needs assessments, market surveys and training needs assessments important to be done during the project formulation. • Enterprise-based training using apprenticeships can be cost-effective method of achieving marketable skills. • Recognition that skills training in cases of high illiteracy levels needs to be combined with non-formal basic education. • It is good practice to integrate entrepreneurship training with technical skills training but expertise and adequate training materials need to be provided. • Giving away start-up kits is common practice in post-crisis projects but can counter the drive towards developing a self-help and entrepreneurial culture. • Vocational Education and Training Centres that create facilities for skills development for livelihood recovery and develop institutional capacities that contribute to social stabilisation and economic development often fall under Ministries of Education or Labour but UNIDO naturally partners Ministry of Trade and Industry/Commerce. • Construction work absorbs substantial project management efforts and always results in delays and project extensions. • The Growth Centre concept has been shown to have 2 major challenges; ownership & financial stability. |
| Relevance | <ul style="list-style-type: none"> • Most projects were highly relevant but special efforts have to be made to obtain funding for Track B & C activities (i.e. mid-term local reintegration & medium-term development) where most of UNIDO's comparative advantage is concentrated. |

| Evaluation point | Observations |
|---------------------------------|---|
| Efficiency | <ul style="list-style-type: none"> • Centralised UNIDO project management and tendering systems result in delays, especially for procurement of equipment. • Project monitoring focuses on project outputs, with less attention paid to outcome and impact monitoring. |
| Effectiveness | <ul style="list-style-type: none"> • There was achievement of project outcomes against the Log-Frames, but the problem was that the Log-Frames were weak and evaluation done too early to measure results. |
| Sustainability | <ul style="list-style-type: none"> • Not sustainable without clear institutional anchoring and securing of regular budgets and financial sustainability. |
| Impacts | <ul style="list-style-type: none"> • Were livelihoods improved? • Economic reintegration of ex-combatants. • Improved functioning of skills development systems at GCs |
| Project Design | <ul style="list-style-type: none"> • Donor priorities, rules and conditionalities (e.g. short project durations) are shaping poor project design, e.g. planning missions, originally not sufficiently funded to identify the best interventions, then pushed into the inception phase that further reduces project implementation. • Deficits in intervention logic, concentration on outputs rather than outcomes, poor log-frames. • Is UNIDO scope deep (as opposed to wide) or concentration on quality (as opposed to outreach)? |
| Project Management | <ul style="list-style-type: none"> • The centralised management style of UNIDO adds unnecessary delays, for example minor expenses have to be sanctioned at HQ through the MOD system, which does not favour fast reactions or adjustments, as required from fast-changing post-crisis contexts. |
| Conclusions and Recommendations | <ul style="list-style-type: none"> • Sound business planning and clarity on ownership of assets are essential for GC projects. • The critique is not on the Project Managers but on the inefficiencies of the UNIDO Management System. • Training of Trainers should be a focus on capacity development. • GCs pose particular sustainability challenges and UNIDO should conduct ex-post evaluations. • More resources should be given to sound project planning and fact-finding and proper Log-Frame and monitoring techniques. • UNIDO should decentralise decision-making processes and budget authority to the field and simplify the MOD payment structure. • Fast-track procedures are required for post-crisis projects including special funds reserved for fast approval. |

Independent Evaluation of Mano River Union Project (2010)

Although the programme was designed for US\$ 21.5 million, only US\$ 5 million for operations in the first year was granted by the Government of Japan (GOJ) for the first year. But 2,600 youths did receive training in traditional trades (tailoring, hairdressing, carpentry etc.) in the same border areas of the current project by entrepreneurs through 'supported apprenticeships'. There were other activities carried out such as setting up a competitive grant scheme (called Start-and-Improve-Your -Business (SIYB)) and partnerships with the private sector, skills development training and plans to set up a sub-regional Labour Market Information System and a Youth Forum.

A good start was made on these initiatives but the programme was never finished due to lack of funds and there was uncertainty that the trainings would lead to gainful employment and decent work for the youth. Some of the key evaluation points are given in the table below:

Table 3 - Main points from the independent evaluation of the Manu River Union Project (2010)

| Evaluation point | Observations |
|------------------|--|
| Relevance | <ul style="list-style-type: none"> • Selection of the border areas was highly relevant because of the history of conflict there and the fact that young people did not get full schooling and therefore lack employable skills. • Short-term emergency funding for medium-term income creation activities entails considerable risk and should be avoided. |
| Effectiveness | <ul style="list-style-type: none"> • The contents of trainings were not designed with reference to market surveys and future trends. • Very little training done on agriculture-related fields such as improved food-processing and services for agricultural production. |
| Efficiency | <ul style="list-style-type: none"> • Administrative practices of the UN agencies negatively impacted on efficient delivery and led to delays and hiring of project staff as not co-ordinated and with short contracts. |
| Sustainability | <ul style="list-style-type: none"> • Short time period of implementation meant that not all activities have the potential to be technically or financially sustainable. |

| | |
|---------------------------------|---|
| Project Management | <ul style="list-style-type: none"> • Monitoring and evaluation not given enough attention due to extreme implementation pressure. • Project funds were not retained for an independent evaluation. • The need to produce results in a short time became a constraint and a project extension had to be agreed for UNIDO. • Administrative bureaucracy led to extensive delays and costly wasting of time that should have been spent on substantive issues. • Logistical challenges in working in remote border areas and across 4 countries with linguistic diversity. • Procurement of equipment and training materials to a variety of small businesses under complicated procedures took up too much of the field staff's time. An outside procurement agent should be used with experience of local conditions. |
| Conclusions and Recommendations | <ul style="list-style-type: none"> • The funding principles for carrying out the trainings created much debate; UNIDO takes the position that trainees should not receive any incentive payments and trainers are not paid salaries and although this gives some assurance of commitment, it is counter to the majority of assistance programmes which the beneficiaries are used to. • Identify new and innovative sectors and technologies for development assistance, beyond simple training, such as in agriculture, fisheries and renewable energy. • Promote the grant SIYB initiative as the main business tool with 20 master trainers in each country to ensure sufficient ToT capacity. • Enter into negotiations with MFIs about innovative financing, with Government providing a collateral fund, a concept that has worked in other West African countries. |

Annex 7: Solar Appendices

Appendix 1 - Bo GC Load Details and Demand Assessment

| Category | Equipment | Source of electricity | No of units | Load per unit (kW) | Total load (kW) | Operating hours per day | Total demand per day (kWh) |
|----------------------------|-----------------------|-----------------------|-------------|--------------------|-----------------|-------------------------|----------------------------|
| Fabrication | Hand Grinding Machine | SPV | 1 | 1 | 1 | 4 | 4 |
| | Hand Drill | SPV | 1 | 0.75 | 0.75 | 4 | 3 |
| | Lathe machines | DG | 1 | 2.238 | 2.238 | 3 | 6.714 |
| | Cutter | DG | 1 | 1.119 | 1.119 | 3 | 3.357 |
| | Bender | DG | 1 | 1.492 | 1.492 | 3 | 4.476 |
| | Roller | DG | 1 | 2.238 | 2.238 | 3 | 6.714 |
| | Welding Plant | DG | 1 | 5.595 | 5.595 | 3 | 16.785 |
| Carpentry | Ripping machine | SPV | 1 | 1 | 1 | 3 | 3 |
| | Planing machine | DG | 1 | 2.238 | 2.238 | 3 | 6.714 |
| Tailoring | Zig-Zag | SPV | 2 | 0.15 | 0.3 | 1 | 0.3 |
| | Manual | SPV | 10 | 0.15 | 1.5 | 4 | 6 |
| Blacksmithing | Blower | SPV | 1 | 0.2238 | 0.2238 | 4 | 0.8952 |
| Weaving | Loomsets | SPV | 4 | 0.746 | 2.984 | 2 | 5.968 |
| Bo Growth Centre Load | | SPV | | | 16.4 | 5 | 82.0 |
| Plant auxiliary light load | | SPV | | | 0.75 | 4 | 3 |
| Pant other electrical load | | SPV | | | 0.8 | 4 | 3.2 |
| Solar PV Total | | | | | 25.71 | | 111.36 |
| Diesel Gen. Total | | | | | 14.92 | | 44.76 |
| Grand Total | | | | | 40.63 | | 156.12 |

Appendix 2 - Pujehun GC Load Details and Demand Assessment

| Category | Equipment | Source of electricity | No of units | Load per unit (kW) | Total load (kW) | Operating Hours per day | Total demand per day (kWh) |
|------------------------------|--------------------------------|-----------------------|-------------|--------------------|-----------------|-------------------------|----------------------------|
| Food processing | Hammer mill (big) | DG | 1 | 5.595 | 5.595 | 2 | 11.190 |
| | Hammer mill (small) | DG | 1 | 5.222 | 5.222 | 2 | 10.444 |
| | Cassava grater | DG | 1 | 4.103 | 4.103 | 2 | 8.206 |
| | Cassava chipper | DG | 1 | 4.103 | 4.103 | 2 | 8.206 |
| | Rice huller | DG | 1 | 5.222 | 5.222 | 4 | 20.888 |
| | Palm oil expeller | SPV | 1 | 3.730 | 3.730 | 5 | 18.650 |
| | Palm fruit stripper | SPV | 1 | 2.238 | 2.238 | 5 | 11.190 |
| | Bag stitcher | SPV | 1 | 0.373 | 0.373 | 5 | 1.865 |
| | Plastic film sealer | SPV | 1 | 0.300 | 0.300 | 5 | 1.500 |
| | Cassava peeler | SPV | 1 | 1.492 | 1.492 | 5 | 7.460 |
| | Hydraulic press | Manual | 1 | - | - | - | - |
| | Screw press | Manual | 1 | - | - | - | - |
| Tailoring | Sewing machine | SPV | 9 | 0.150 | 1.350 | 6 | 8.100 |
| | Designing / Embroidery machine | SPV | 5 | 0.200 | 1.000 | 1 | 1.000 |
| | Electrical Iron | SPV | 2 | 0.750 | 1.500 | 3 | 4.500 |
| Auto mechanics & metal works | Planned | SPV | -- | -- | 3.000 | 4 | 12.000 |
| Lighting load | Bulbs | SPV | | | 0.750 | 6 | 4.500 |
| Other electrical loads | Fans, security lights etc. | SPV | | | 0.800 | 6 | 4.800 |
| Solar PV Total | | | | | 16.53 | | 75.57 |
| Diesel Gen. Total | | | | | 24.25 | | 58.93 |
| Grand Total | | | | | 40.78 | | 134.50 |

Appendix 3 - Kpandebu GC Load Details and Demand Assessment

| Category | Equipment | Source of electricity | No of units | Load per unit (kW) | Total load (kW) | Operating hours per day | Total demand per day (kWh) |
|--------------------------|-----------------------------|-----------------------|-------------|--------------------|-----------------|-------------------------|----------------------------|
| Food processing | Gari sieving machine | SPV | 1 | 4.103 | 4.103 | 3 | 12.309 |
| | Small grater | SPV | 1 | 4.103 | 4.103 | 3 | 12.309 |
| | Cassava chipper / slicer | SPV | 1 | 4.103 | 4.103 | 3 | 12.309 |
| | Hammer mill | SPV | 1 | 4.103 | 4.103 | 3 | 12.309 |
| | Cassava grater | DG | 1 | 5.970 | 5.970 | 3 | 17.91 |
| | Rice mill | DG | 1 | 5.222 | 5.222 | 3 | 15.666 |
| Metal workshop | Coventry lathe | SPV | 1 | 1.500 | 1.500 | 4 | 6.000 |
| | Sharpener | SPV | 1 | 0.560 | 0.560 | 4 | 2.240 |
| Tailoring | Sewing machine | SPV | 13 | 0.15 | 1.950 | 5 | 9.750 |
| Lighting load | Bulbs | SPV | NA | - | 0.750 | 4 | 3.000 |
| Other electrical loads | Fans, security lights, etc. | SPV | NA | - | 0.800 | 4 | 3.200 |
| Solar PV Total | | | | | 25.71 | | 111.36 |
| Diesel Gen. Total | | | | | 14.92 | | 44.76 |
| Grand Total | | | | | 33.16 | | 107.00 |

Appendix 4 - Notes on renewable energy for productive uses

UNIDO has a mandate on clean energy access for productive use: “Enhancing access to modern and reliable energy supplies is widely regarded as a prerequisite for economic development in developing countries and countries with economies in transition. For such development to be sustainable, this energy must be used to promote productive uses that create jobs and more income-generation opportunities for local communities. UNIDO therefore helps countries increase access to modern energy supplies, especially based on renewable energy, in order to support the development of productive capacities in rural and urban areas.”³⁵

So by the start of the Growth Centres projects in Sierra Leone and RSTI and MYS projects in Liberia in March 2011, UNIDO's own (now well established) experience in development of renewable energy projects across a wide range of technologies and countries and their link to productive uses should have been easy to draw on in the design of the solar PV projects.

However, it is found that the projects were somewhat isolated from the main PD outcomes; in Sierra Leone that of using new equipment, infrastructure and training to expand and improve the quality of the commercial operation in processing local agricultural produce; and in Liberia that of introducing training programmes in rubber and rubber wood processing in Harper and acquiring trainings in masonry, metal working, plumbing, soap making, carpentry, gara tying, hairdressing, tailoring and auto-mechanics in Ganta. This may have been due to their highly technical nature and the decision by UNIDO to assign a separate solar PV budget holder and project manager, with little overlap with the main Project Manager.

Therefore some guidance is suggested for the future design of renewable energy projects within the context of productive use beneficiaries:

- 1) Don't develop a renewable energy project for its own sake - for example at the proposed project site, is there existing electrification which could be used or improved for productive use activities? Even if the plan is based on diesel generators, the key outcome is the productive use and value-added activity, not the electricity system itself.
- 2) Carry out a full demand survey - this should be done without any assumption of technology and should allow for future growth data (population and economy).
- 3) Design of the system - based on the full survey, design the energy supply as much as possible within UNIDO's mandate of using renewable energy where possible, but accepting that if capacities cannot be met by the available resource, then consider hybrid systems or extension of the grid.

³⁵ UNIDO website - “Clean energy access for productive use”

- 4) Local technology - use technology with sustainability in mind, using locally available components as much as is possible (e.g. batteries, control systems, ancillaries, lighting etc.).
- 5) Maintenance - design final systems with local capabilities on maintenance in mind or have a full training programme that transfers skills as appropriate.
- 6) Use local knowledge - what previous knowledge or experience can be drawn on locally or regionally in development of energy systems for productive uses?

Annex 8: Prices of selected Foods in Pujehun District, Sierra Leone (2011–12)

| TABLE 4.1 PRICES OF SELECTED FOODS IN PUJEHUN DISTRICT, SIERRA LEONE, 2011–12 | | | | | | | | | | |
|---|------|--------------------------|--------------|-----------------|---------|--------------------------|--------------|-----------------|---------|--------------------------|
| Product | Unit | Prices (SLL) in May 2011 | | | | Prices (SLL) in May 2012 | | | | Average price change (%) |
| | | Village market | Local market | Regional market | Average | Village market | Local market | Regional market | Average | |
| Local rice | Cup | 1,000 | n.a. | 1,200 | 1,100 | 1,100 | 1,200 | 1,200 | 1,167 | +6.1 |
| Imported rice | Cup | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 933 | 978 | -2.2 |
| Raw cassava | Kg | 500 | n.a. | 1,000 | 750 | 917 | 2,000 | 1,333 | 1,417 | +88.9 |
| Processed cassava (gari) | Cup | 250 | 250 | 200 | 233 | 400 | 300 | n.a. | 350 | +50.2 |
| Local palm oil (dura variety) | Pint | 1,000 | 1,000 | 1,200 | 1,067 | 1,400 | 1,500 | 1,433 | 1,444 | +35.3 |
| Masanke palm oil (tenera variety) | Pint | 700–800 | 800 | 1,000 | 850 | 1,000 | 1,000 | 1,000 | 1,000 | +17.7 |
| Sweet potato | Pile | 500 | n.a. | 1,000 | 750 | 917 | 1,000 | 1,333 | 1,083 | +44.4 |
| Flour | Cup | 1,000 | 900 | 1,000 | 967 | n.a. | 1,100 | 1,500 | 1,300 | +34.4 |
| Salt | Cup | 700 | 800 | n.a. | 750 | 1,000 | 500 | 500 | 667 | -11.1 |
| Sugar | Cup | 2,000 | 2,200 | 2,000 | 2,067 | 2,000 | 2,000 | 2,500 | 2,167 | +4.8 |

Note: n.a. = not available.

Source: Prices were recorded by Welthungerhilfe project staff. However, village-level prices were taken in different locations within the region affected by the lease in 2011 and 2012. The inflation rate of 2011 was 18.5 percent and is estimated to decline to 8.5 percent in 2012 (World Bank 2011a).