

# FINAL REPORT

## REVIEW OF UNDP DPRK SERCARB PROJECT NOVEMBER/ DECEMBER 2016

**Client:**

**UNDP DPRK**  
21 Munsudong  
PO Box 27  
Pyongyang  
DPR of Korea

(short: **UNDP**)

**Author:**

**Mathias Hölzer**  
Calle de Lago Iseo 12, 9D  
28032 Madrid  
Spain

[Mathias.Hoelzer@gmx.net](mailto:Mathias.Hoelzer@gmx.net)

**Date of submission:** 22<sup>nd</sup> of December 2016

---

**Mathias Hölzer**  
*Evaluation Specialist*

## Table of Content

<b>EXECUTIVE SUMMARY .....</b>	<b>I</b>
A. PROJECT DESCRIPTION .....	I
B. PROJECT PROGRESS SUMMARY .....	II
C. CONCISE SUMMARY OF CONCLUSIONS.....	III
D. LESSONS-LEARNT AND RECOMMENDATIONS .....	III
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 GENERAL PROJECT DESCRIPTION .....	1
1.2 PURPOSE OF THE REVIEW AND OBJECTIVES.....	1
1.3 SCOPE OF WORK AND METHODOLOGY .....	2
1.4 METHODOLOGY OF EVALUATION .....	2
<b>2 PROJECT DESCRIPTION AND BACKGROUND CONTEXT .....</b>	<b>4</b>
2.1 PROJECT CONTEXT .....	4
2.2 PROJECT OUTPUTS .....	4
2.3 PROJECT SITES .....	5
2.4 STAKEHOLDERS AND PROJECT IMPLEMENTATION ARRANGEMENTS.....	5
2.4.1 <i>MoLEP</i> .....	6
2.4.2 <i>SHMA</i> .....	6
2.4.3 <i>SLUG</i> .....	6
2.5 PROJECT TIMING, MILESTONES AND ACTIVITIES.....	6
2.5.1 <i>Project timing and milestones</i> .....	6
2.5.2 <i>Project activities</i> .....	8
<b>3 FINDINGS .....</b>	<b>11</b>
3.1 PROJECT STRATEGY.....	11
3.1.1 <i>Project Design</i> .....	11
3.1.2 <i>Results Framework</i> .....	12
3.2 PROGRESS TOWARDS RESULTS .....	12
3.3 PROJECT IMPLEMENTATION.....	13
3.3.1 <i>Work planning</i> .....	14
3.3.2 <i>Finance</i> .....	14
3.3.3 <i>Project-level monitoring and evaluation systems</i> .....	14
3.3.4 <i>Stakeholder engagement</i> .....	14
3.3.5 <i>Reporting</i> .....	15
3.3.6 <i>Communications</i> .....	15
3.4 SUSTAINABILITY .....	16
3.4.1 <i>Financial risks to sustainability</i> .....	16
3.4.2 <i>Socio-economic to sustainability</i> .....	16
3.4.3 <i>Institutional framework and governance risks to sustainability</i> .....	17
3.4.4 <i>Environmental risks to sustainability</i> .....	17
3.5 OVERALL EVALUATION .....	17
<b>4 LESSONS LEARNT, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>18</b>
4.1 LESSONS LEARNT .....	18
4.2 CONCLUSIONS.....	18
4.3 RECOMMENDATIONS .....	19
<b>5 REFERENCES .....</b>	<b>20</b>
<b>6 ANNEXES .....</b>	<b>21</b>

## Table of Tables

<b>TABLE 1 PROJECT INFORMATION TABLE .....</b>	<b>I</b>
<b>TABLE 2 RATINGS &amp; ACHIEVEMENT SUMMARY TABLE .....</b>	<b>III</b>
<b>TABLE 3 LESSONS LEARNT AND RECOMMENDATIONS .....</b>	<b>V</b>
<b>TABLE 4 YEARLY PROJECT TARGETS AS DEFINED BY THE PRODOC.....</b>	<b>7</b>
<b>TABLE 5 YEARLY PROJECT TARGETS AS REVISED AFTER THE START OF THE PROJECT .....</b>	<b>8</b>
<b>TABLE 6 ESTIMATED COMMUNITY AND GOVERNMENT CONTRIBUTION IN 2015 .....</b>	<b>9</b>
<b>TABLE 7 ESTIMATED COMMUNITY AND GOVERNMENT CONTRIBUTION IN 2016 .....</b>	<b>10</b>
<b>TABLE 8 SUGGESTED SCHEDULE FOR WEEK 1 OF IN-COUNTRY MISSION.....</b>	<b>30</b>
<b>TABLE 9 SUGGESTED SCHEDULE FOR WEEK 2 OF IN-COUNTRY MISSION.....</b>	<b>30</b>
<b>TABLE 10 CONSULTANCY IMPLEMENTATION PLAN.....</b>	<b>31</b>
<b>TABLE 11 EVALUATIVE MATRIX.....</b>	<b>34</b>

## Table of Maps

<b>MAP 1 PROJECT AREA (YELLOW).....</b>	<b>29</b>
<b>MAP 2 SITE VISIT MAP, BACKGROUND MAP: BING MAPS ®.....</b>	<b>35</b>

## List of Acronyms and Abbreviations

<b>AWP</b>	Annual Work Plan
<b>AWS</b>	Automated Weather Station
<b>BtOR</b>	Back to office report
<b>CDR</b>	Combine Delivery Report
<b>CPD</b>	Country Programme Document
<b>CO</b>	Country Office
<b>DIM</b>	Direct Implementation Modality
<b>DPR Korea</b>	Democratic People’s Republic of Korea (DPRK)
<b>EU</b>	European Union
<b>EWS</b>	Early Warning System
<b>FMB</b>	Forest Management Board (MoLEP’s county level implementation agency)
<b>GoDPRK</b>	Government of DPR Korea
<b>GOE</b>	General Operating Expenditures
<b>HQ</b>	Headquarters
<b>IC</b>	International Consultant
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MoLEP</b>	Ministry of Land and Environment Protection
<b>MTR</b>	Mid-Term Review
<b>NCC</b>	National Coordinating Committee
<b>NGOs</b>	Non-Governmental Organizations
<b>PC</b>	Peoples Committee
<b>PM</b>	Project Manager/ Project Management
<b>ProDoc</b>	Project document
<b>PSC</b>	Project Steering Committee
<b>SERCARB</b>	Strengthening Ecosystem Resilience and Community Adaptive Capacity in Climate Affected River Basins in DPRK
<b>SHMA</b>	State Hydro-Meteorological Administration
<b>SLUGs</b>	Sloping Land User Groups
<b>UNDP</b>	United Nations Development Programme
<b>UNSC</b>	United Nations Security Council
<b>USA</b>	United States of America

## **Acknowledgements**

A large number of people supported and facilitated the preparation, In-Country mission and the writing of this report. I would like to take the opportunity to mention some of them who made the assignment a success.

First of all I would like to thank the staff of the UNDP CO, who have been a great support by enabling fast and smooth visa issuing, comprehensive and quick response to any upcoming questions and doubts raised during and after the mission and the proactive discussions on the findings, results and recommendations. Namely I would like to thank Mr. Tapan Mishra (UNDP DPRK Resident Representative), Mr. Stephen Kinloch-Pichat (UNDP DPRK Deputy Resident Representative), Mr. Hua Yu (UNDP DPRK SERCARB Project Manager), Mrs. Le Le Lan (UNDP DPRK Monitoring and Evaluation Specialist) and Mr. Sung Chol Choe (UNDP DPRK Programme Analyst), who made this evaluation possible through their unlimited support and input.

Likewise I would like to thank as well the national counterparts, MoLEP and SHMA and the NCC for the useful and eye-opening discussions, the insights given to the project and its history as well as for the good organization of the Field Visits and the inputs received during the writing of this report. Namely I would like to thank Mr. Paek Sung Chol (NCC UNDP Coordinator), Mrs. Kim Jong Ok (MoLEP Chief Desk Officer), Mr. Song Yong Chol (SHMA Senior Officer) and Ms. Pang Un Gyong (MoLEP Interpreter) for their excellent work and contribution to this report.

## Executive summary

In the following chapters a brief summary of the present report is given, to give an introduction to the report in which the results are explained in much more detail.

<b>Project Title:</b>	<b>Strengthening Ecosystem Resilience and Community Adaptive Capacity in Climate Affected River Basins in DPRK (SERCARB)</b>		
<i>ATLAS Award ID:</i>	00074802	<i>ProDoc Signature Date (date project began):</i>	June 28 <sup>th</sup> 2013
<i>ATLAS Project ID</i>	00087040	<i>Date project manager hired:</i>	Q1 2015
<i>Country:</i>	DPR Korea	<i>Inception Workshop date:</i>	30-31 March 2015
<i>Region:</i>	Asia	<i>Midterm Review completion date:</i>	December 21 <sup>st</sup> 2016
<i>Focal Area:</i>	Climate Change and Environment	<i>Planned planned closing date:</i>	December 31 <sup>st</sup> 2016
<i>Implementing Partners:</i>	UNDP Direct Implementation (MOLEP and SHMA are key national level counterparts)	<i>If revised, proposed closing date:</i>	December 31 <sup>st</sup> 2018

<b>Project Financing</b>	<b>at CEO endorsement (US\$)</b>	<b>at Review (US\$)</b>
<i>[1] UNDP contribution:</i>	2,200,000	2,300,000
<i>[2] Other partners:</i>	–	–
<b>PROJECT TOTAL COSTS [1 + 2]</b>	2,200,000	2,300,000 <sup>1</sup>

**Table 1 Project Information Table**

## A. Project Description

The overall objective of the project is to maintain and enhance the beneficial services provided by natural ecosystems in order to secure livelihoods, food, water and health, reduce vulnerability to climate change, store carbon and avoid emissions from land use change and forestry. To achieve this objective the project has chosen an integrated watershed management approach, which is designed to treat the watershed in the project sites as a system and taking into account the influences and interdependencies between the different subsystems within the watershed. The main outputs as defined in the ProDoc are:

- Strengthen the community capacities for participatory hazard mapping and disaster reduction;
- Improve the Weather monitoring and EWS in the watersheds to reduce the impact of natural disasters caused by heavy rains;
- Improve the forest management to reduce flood risk, landslides and erosion;
- Ensure and promote the sustainable utilization and rehabilitation of sloping lands in agricultural landscapes;
- Improve the multi-stakeholder coordination and project management.

The SERCARB project is directly executed and implemented by UNDP, giving UNDP a much bigger role in the management, operation, monitoring and accountability of the project. Due to the nature of the project interventions there are two national counterparts: MoLEP and SHMA, focusing on different aspects of the project. MoLEP focus is on the output 1, 3 and 4, while SHMA's focus mostly lies on weather monitoring and the EWS under output 2.

It shall be noted here that the project suffered some serious delays, which had their root causes outside of project range influence. Amongst others quarantine measures implemented because of the Ebola crisis in

<sup>1</sup> Budget increased by \$US 100,000 to respond to the Rason flood damages in September 2016.

March 2015, complicated and lengthy clearance of specifications of equipment due to UN Sanctions as well as the recurring close of the banking channel for international organizations in DPRK since March 2016, which restricted the purchases to be done by UNDP.

## B. Project Progress Summary

The project has five stated objectives, as stated above. The level of completion of each of these objectives has been derived from the Desk Study, the In-Country mission as well as further consultations with the PM team and the PM. These results are in line with the reported Quarterly Reports prepared by the project during project lifetime.

**Output 1 – Strengthen the community capacities for participatory hazard mapping and disaster reduction** – This output is considered as to be completed fully in the present project regions, given the fact that in all 5 project sites the Hazard Mapping exercise has been finished by the date of the review.

**Output 2 – Improve the Weather monitoring and EWS in the watersheds to reduce the impact of natural disasters caused by heavy rains** – This output lacks well behind the implementation plan as the procurement process has not been finalized by the date of the review, meaning that no equipment necessary for the weather monitoring and EWS has been purchased so far, except initial in-country or overseas training provided to the local level technicians.

**Output 3 – Improve the forest management to reduce flood risk, landslides and erosion** – Present assessment shows that most of the activities planned until end of 2016 have been finalized. Awareness was raised through trainings and international study tours. Likewise the nursery capabilities have been improved, by which the national and local capacity was improved to sustainably supply seedlings and seed for reforestation campaigns focused on sustainable income generation as well as reforestation in areas without agricultural activities.

**Output 4 – Ensure and promote the sustainable utilization and rehabilitation of sloping lands in agricultural landscapes** – Around 90% of the activities planned under this output have been finalized. Namely the construction of the Awareness Center in Joyang-dong, the income generating activities were initiated and well received in the Pilot Sites and embankments in the project counties have been finished. Likewise training materials have been disseminated, increasing the awareness on sustainable watershed management and sustainable utilization of land. Problems are found in the output targets defined in the ProDoc and later reviewed in one of the PSC meetings.

**Output 5 - Improve the multi-stakeholder coordination and project management** – The output target is likely to be reached by the end of project, benchmarked against the defined target.

Within the evaluation framework the outputs are ranked according to the following table.

Measure	Achievement Rating <sup>2</sup>	Description
Project Strategy	Highly Satisfactory	The project aims to maintain and enhance the beneficial services provided by natural ecosystems in order to secure livelihoods, food, water and health, reduce vulnerability to climate change, store carbon and avoid emissions from land use change and forestry. The selected project strategy shows a high degree of adaption to the national context of DPR Korea and is well in line with the GoDPRK and Line Ministries goals and strategies. Likewise the experience by other agencies active in DPR Korea have been taken into account during the formulation phase of the project.
Progress Towards Results	Output 1: Highly Satisfactory	Benchmarked against the targets set for the end of the project this component has been completed. With the Hazard mapping exercise finalized in all 5 project Ri's and additional trainings performed, by this building capacities for disaster risk reduction and mitigation structures.

<sup>2</sup> Full description of Review ratings can be found in Annex 10, based on the recommendations given in [1].

Measure	Achievement Rating <sup>2</sup>	Description
	Output 2: <b>Satisfactory</b>	<p>Taken the set goals during the formulation of the project as criteria this output has not been achieved to its full extent. Mainly because of procurement constrains particular for DPR Korea and difficult to handle.</p> <p>As it was not possible to implement working EWS at the Pilot Sites before the present review, it is hard to rate the achievement of this output. Nevertheless the specifications of the equipment needed for setting up the EWSs were cleared and ready for procurement, whilst the documents shown and the design of the EWS indicate that it is feasible to achieve the set targets by the end of extension period in 2018.</p>
	Output 3: <b>Highly Satisfactory</b>	<p>Due to project delay and procurement constrains not all the activities planned could be implemented in time. Thus the activities under this output have not been finalized as expected by end of 2016. Nevertheless the outlook is positive as the implementation is only delayed, but not jeopardized by this delay. Dissemination of information and knowledge and specific training programs on forest management activities have been undertaken and provide a good starting point for the Extension Period of the project. Likewise the FMB has been strengthened by the Awareness Center.</p>
	Output 4: <b>Highly Satisfactory</b>	<p>The number of beneficiaries as indicator of success for this output is well within the expected number, making this output a success.</p> <p>The second target defined in the Project Document, and revised during the 6<sup>th</sup> PSC meeting could not be assessed as expected and might need a revision as it has not been used in previous evaluations nor in the Project Document itself.</p>
	Output 5: <b>Satisfactory</b>	<p>Benchmarked against the original timeframe of 3.5 years the stage of implementation is overall good, with most of the project activities implemented or on the way of implementation. The set goal of 95% implementation of project activities was not reached due to external factors, namely the close of the bank channel was a limiting factor.</p> <p>Even though an external factor the particular present situation in DPR Korea with the different sanctions in place could threaten some of the targets to be reached.</p>
Project Implementation & Adaptive Management	<b>Highly Satisfactory</b>	<p>Taking into consideration the limitations and obstacles external of the project, namely the tightened sanction regime as well as the closing of the bank channel the project has been implemented in a very good way. Stakeholder engagement as well as the very close M&amp;E scheme helped the project to keep on track.</p>
Sustainability	<b>Likely</b>	<p>Given the condition that the project targets and objectives are in line with the national counterpart objectives and aims the sustainability is considered to be likely. Threats to this classification could be selected technical solutions that would not be available after the project has finished and lack of (economical) resources. The first can be addressed by the PM, the last is out of PM range of action, but can be addressed towards the project partners.</p>

**Table 2 Ratings & Achievement Summary Table**

### C. Concise summary of conclusions

The project is assessed as an overall successful project with well-selected tools and approaches, which respond to needs formulated in the country. It is therefore and to assure the sustainability of the implemented project activities advisable to extend the project by the requested 2 years with an additional budget of up to \$US 5Mio.

### D. Lessons-learnt and Recommendations

The lessons-learnt and recommendations derived by the IC from the present consultancy are summarized below. Detailed recommendations can be found in chapter 4.



N°	Lessons learnt	Recommendations
1	<p>The effective two years project life is a too short period to demonstrate the full success of the present project. One-year no cost extension will be very important for the project success and to finalize the activities under the present ProDoc.</p> <p>Early recruitment of project team is crucial for the success of any project. One of the reasons for initial delay was the late formation of the project team;</p>	<p>Even without any further extension with additional budget the project shall be given additional time so the initiated project activities can be finished and make the project a success story;</p>
2	<p>The SERCARB project is an excellent example of best practice in several aspects, including, capacity building, sustainability, target population participation and mainstreaming;</p> <p>The time invested into project design, was valuable for ensuring effective project formulation, planning of meaningful activities around the proposed targets and for facilitating implementation;</p> <p>Through the successful implementation of key project features further initiatives can be initiated. That was successfully shown by the project for the embankment activities as well as the newly build Awareness Center built in Alil-Ri.</p> <p>Good organization of international and national level project management is key for the success of any project. This is achieved through regular communication, monitoring of results, and clear follow-up actions whenever potential problems are identified;</p>	<p>Replicate the developed techniques and approaches in additional project sites during an extension period of the present project. The focus for the extension of the project shall be laid upon</p> <ul style="list-style-type: none"> <li>• <i>The existing project counties, further strengthening, improving and deriving lessons-learnt from the project activities undertaken so far</i></li> <li>• <i>Project regions outside the Pilot County and along other rivers, in which the activities from the Pilot Ri's are replicated;</i></li> </ul>
3	<p>Wherever possible and meaningful participatory approaches and techniques are key elements for sustainability and success of projects that work directly with target population;</p>	<p>Participatory approaches, such as the Participatory Hazard Mapping are key for sustainability and shall be maintained for the Project Extension;</p>
4	<p>Continuous review of key outputs and targets enables fast and high quality assessment of the project. Some of these targets have not been followed always in a consistent way by the project team</p>	<p>To improve the operational handling of the project the targets as well as the indicators for Output 3 and Output 4 shall be revised and adapted for the planned extension of the project. In general realistic targets shall be defined during the inception phase of the project for each county during the extension phase of the project.</p>
5	<p>The project clearly demonstrated that the problems described in the ProDoc can be best and sustainably addressed with an integrated approach that takes into account all aspects and levels of a watershed rather than focusing on isolated solutions;</p> <p>The problems identified in the ProDoc being a problem for the whole country it has been good practice to design the project around some two Pilot Site in which an adapted methodology and approach has been developed that was thereafter implemented in additional sites and watersheds;</p>	<p>Ensure the coordination of activities put in place by different stakeholders</p> <ul style="list-style-type: none"> <li>• <i>Interventions driven by UNDP and PC shall take place in an integrated and coordinated way to avoid any negative side effects of e.g. river embankments</i></li> <li>• <i>All used techniques and approaches shall be assessed with regards to their sustainability;</i></li> <li>• <i>All techniques and approaches shall be easy to use in the given context;</i></li> </ul>

N°	Lessons learnt	Recommendations
6	Further project development and sustainability depends very much on the continuous revision of MoLEP and SHMA capabilities and the ability of project partners to adapt to new (external) conditions and requirements.	Consolidate and strengthen MoLEP and SHMA capacities further: <ul style="list-style-type: none"> <li>• <i>The nursery capabilities shall be consolidate and strengthened for the extension of the project to not rely on purchase of seedlings and seeds from outside DPRK;</i></li> <li>• <i>Forest fire fighting capabilities shall be strengthened as well;</i></li> <li>• <i>Maintenance and repair capabilities of SHMA for the EWS and AWS shall be strengthened to ensure sustainability of this component;</i></li> </ul>
7	Especially in the context of DPRK fast clearance of the specifications is necessary to avoid unnecessary delays in the project implementation. This topic has been addressed by the BRH through a system of clearance pre-check;	The clearance procedure implemented by the CO shall be maintained over the project lifespan to ease the clearance of goods and services that need to be purchased under the project;  Those parts of the EWS (and other project activities), that does not need the purchase of equipment, shall be implemented as soon as possible to avoid any further delays under this output

**Table 3 Lessons learnt and recommendations**

## 1 Introduction

In the following subchapters an introduction to the project itself as well as into the rationale and methodology of the present consultancy is given. Main purpose is to enable a better understanding of the projects context and framework.

### 1.1 General Project Description

UNDP's strategy for ecosystem-based adaptation<sup>3</sup> has the objective to maintain and enhance the beneficial services provided by natural ecosystems in order to secure livelihoods, food, water and health, reduce vulnerability to climate change, store carbon and avoid emissions from land use change and forestry. The SERCARB project strategy has been designed in accordance with this overall goal, with specific interventions in line with the CPD Outcomes. The project has been designed around five project-level outputs, which are:

- Output 1:** Community capacities for participatory hazard mapping and disaster reduction strengthened.
- Output 2:** Weather monitoring and early warning systems (EWS) improved in pilot watersheds.
- Output 3:** Improved forest management to reduce flood risk, landslides and erosion in pilot watersheds.
- Output 4:** Sustainable utilization and rehabilitation of sloping lands in agricultural landscapes.
- Output 5:** Multi-stakeholder coordination and project management.

It shall be noted here that the project suffered some serious delays, which had their root causes outside of project range influence. First it was not possible to find an adequate PM for the project. The envisioned new starting date, 01<sup>st</sup> of January 2015 was then affected by the Ebola crisis and the quarantine measures implemented, which further delayed the start of the project and disabled baseline survey as planned at the beginning of the project. The third big threat to project implementation just happened in March 2016, when the UNDP banking channel was closed and "cash conservation mode" was implemented by the CO, which restricted all activities that require in-country payment. In addition, the tightened UN Sanctions required complicated and lengthy process of clearance for needed international procurement for the project implementation. These delays and obstacles must be taken into account always when reading the present report.

### 1.2 Purpose of the review and objectives

The review is intended to provide a comprehensive in-deep assessment of the project. This review provides an opportunity to critically assess administrative and technical strategies, issues and constraints associated with the implementation context of the project. The evaluation gives recommendations for the improvement of the Project to achieve expected outcomes and meet objectives within the Project timeframe. In the present case the second purpose of the review is to develop a ProDoc draft for the intended 2 years extension of the project with additional budget.

The UNDP project SERCARB originally signed in 2013 and planned to be started as a 3.5 year project suffered a delay of 1.5 years, by that shortening the project lifetime from 3.5 years to slightly less than 2 years. Even so, during second year of 2016, a cash conservation mode has been implemented from March till the end of the year, due to the close of banking channel for funds transfer. Nevertheless the project has been a success story with very positive impact on the target population as well as on DPR Korea central level coordination and working relationship between UNDP and the line ministries MoLEP and SHMA, which are the national counterparts for the implementation of the project.

In view of this success the CO and PM decided to propose an extension of the project by two more years based on the present evaluation. Thus the present review is an evaluation of the achieved project outputs as well as a justification for the extension of the project.

---

<sup>3</sup> <http://www.undp.org/biodiversity/mitigation.shtml>

### 1.3 Scope of work and methodology

This assignment is undertaken for UNDP DPRK, under a contractual arrangement managed by BRH, for the purpose of conducting a review of the SERCARB project in view of its proposed extension. The objective of the consultancy as per ToR was to

#### ***Conduct a Review of the UNDP DPR Korea SERCARB project***

In light of the planned extension of the SERCARB project for an additional period of 2 years, part of the Scope of Work was the formulation of the relevant Proposal, including narrative description and results and resource framework for the extension of the project in appropriate sites and at appropriate scale.

### 1.4 Methodology of evaluation

Mr. Mathias Hölzer (the author of this report) was appointed by the SERCARB PM to conduct the evaluation. The overall planned timeframe for this evaluation was 25 working days with 5 days of preparation, a 10-day In-Country mission as well as a 10-day reporting period.

The present review was done between 21<sup>st</sup> of November and 22<sup>nd</sup> of December. A detailed work plan agreed with UNDP can be found in Annex 5.

The review has been undertaken through a combination of data collection approaches including desk study prior to the In-Country mission, In-Country site visits to the project areas, interviews with relevant stakeholders such as PM and MoLEP and SHMA focal points as well as interviews and meetings with beneficiaries in the project Ri's. Last but not least workshops and formal meetings were conducted with the main stakeholders on the national level to further retrieve information relevant for the review.

Methodology wise the methods and tools as suggested in [1] and [2] were used and adapted to the specific evaluation of this project as the present assessment was a Mid-Term Review nor a complete Terminal Evaluation. Thus the methodology is based on those described in these two guidelines and adapted to the specific project context.

The following methods have been used throughout the assignment to assess the project:

#### **During the In-Country Mission preparation phase:**

- **Desk study review** of all relevant Project documentation (a full list of the used documents can be found in Annex 8 of the present report);

#### **During the In-Country Mission:**

- **Assessment of the performance of the project against the “Output Indicators”** as defined in the initial project document;
- **Site visits** to the Pilot Project County in Kaechon City County (South Pyongan Province) and Pakchon County (North Pyongan Province);
- **Workshop** with stakeholders on national level;
- **Formal Meetings** with stakeholders on national level;
- **Working Sessions** with relevant national stakeholders
- **Interviews with stakeholders and beneficiaries:**
  - PM of the SERCARB project;
  - Heads of SLUG in the two Pilot Ri's;
  - Heads of Substation in the two Pilot Ri's;
  - Chief of Weather Station in Pakchon County.

Detailed list of people met and interviewed can be found in Annex 7.

Main objective for the mix of different methods was to get information from different sources and points of view and by this check the given information for completeness and consistency.

As a first step during the preparation phase an intensive Desk Study has been performed consulting the documents listed in Annex 8. This was done to get a complete overview of the project, its organization, relevant stakeholders as well as undertaken activities. During this Desk Study a detailed work plan has been developed in close cooperation with the project PM team. Likewise a list of questions to be answered has been developed to guide the interviews and meetings. Unfortunately it was not possible to prepare complete questionnaires as due to time constraints detailed work plan was not finished before departure to DPR Korea, leaving some room for improvisation.

During the In-Country mission to DPR Korea the above described methods have been used to collect the project relevant data and to enable the development of the Proposal for the 2 years extension. The complete schedule of the Field Visits can be found in Annex 5, in which also a short description of the used methods is given. Likewise the complete list of project relevant persons met and interviewed during the field visits can be found in Annex 7.

The present report is divided into 5 parts: An **Executive Summary**, which collects the most relevant results, an **introduction**, that offers information on the project context, project history as well as detailed **information on the methodology** used for the evaluation. The remaining chapters collect the **findings** and develop the most relevant **lessons-learnt** and **recommendations** derived from the findings and in light of the planned project extension.

## 2 Project Description and Background Context

In the following chapters a closer project overview is given. Main objective is to contextualize the present review and help to understand the projects objective and strategy.

### 2.1 Project context

The situation analysis conducted during project formulation clearly demonstrates that ecosystem management, climate change adaptation and disaster risk reduction issues are strongly interlinked in DPR Korea. Addressing environmental sustainability in the DPR Korea context requires a strong focus on the impact of climate change and the interplay between environmental degradation and extreme weather events. The project strategy has therefore been designed to focus on ecosystem-based adaptation strategies such as sustainable watershed forest management, as well as sustainable land management in agriculture to reduce soil erosion and runoff and to improve water retention, promote sustainable natural resource management and livelihoods.

### 2.2 Project outputs

According to the ProDoc the “UNDP’s strategy for ecosystem-based adaptation has the objective to **maintain and enhance the beneficial services provided by natural ecosystems in order to secure livelihoods, food, water and health, reduce vulnerability to climate change, store carbon and avoid emissions from land use change and forestry** (sic!)”.

To achieve this overall goal the project under revision has been designed with specific interventions that are in line with the CPD Outcomes. The project-level outputs have been defined as follow:

- Output 1:** Community capacities for participatory hazard mapping and disaster reduction strengthened.
- Output 2:** Weather monitoring and early warning systems (EWS) improved in pilot watersheds.
- Output 3:** Improved forest management to reduce flood risk, landslides and erosion in pilot watersheds.
- Output 4:** Sustainable utilization and rehabilitation of sloping lands in agricultural landscapes.
- Output 5:** Multi-stakeholder coordination and project management.

As per the original ProDoc the following results have been expected as outcome of the SERCARB project for the outputs above defined:

- Output 1:** By end-project, community hazard maps and disaster reduction plans have been completed in at least four locations in two sites, and the plans are being implemented by local committees.
- Output 2:** County and ri-level Peoples Committees in pilot locations have demonstrated capacity to monitor and analyze local weather information, and incorporate these into agricultural, water management and disaster early warning processes.
- Output 3:** Rehabilitation activities undertaken in all priority risk sites, and overall watershed area subject to deforestation, degradation or slope instability reduced by 20%.
- Output 4:** Sustainable management of sloping agricultural lands demonstrated in at least four ri in two counties, resulting in improved livelihoods and energy access for at least 450 households.
- Output 5:** Project implementation completed on time and all key outputs delivered. Project evaluation show specific and quantifiable increase in RP and LP capacities against baseline and detailed targets established during project inception.

## 2.3 Project sites

As per ProDoc four selection criteria have been defined to guide the selection of the Pilot sites as well as further project sites. Main objective for the definition of these criteria was clearly to find project sites that are representative for the geographical conditions in DPR Korea and in which a full demonstration of the possible interventions, which form part of an integrated Watershed Management could be developed. The selection criteria for the Pilot sites according to the project document were:

- **Agro-ecological characteristics:** (...) a suitable mix of forest and agricultural landscapes, typically with forested upland areas, mixed forest and agricultural activity on lower slopes and large-scale agriculture and population centers (villages, farming communes etc.) in the floodplain. (...)
- **Risks and vulnerability:** (...) sites will demonstrate a mix of environmental and climate risk factors, including deforestation threats, evidence of climate-induced flood hazards (floods, slope failure, debris flow, siltation and sedimentation) and unsustainable agricultural practices (encroachment on to hillsides, farming on steep slopes, overharvesting of fuel wood and NTFPs, etc.).
- **Beneficiaries:** (...) number of potential beneficiaries to be targeted, and the projected improvement in livelihoods, access to/potential for energy and other development indicators that the pilot activities can generate. (...)
- **Accessibility and operational feasibility:** (...) physical accessibility (e.g. proximity to Pyongyang, ability to reach the site year-round, availability of local infrastructure and facilities to support project activities), and government clearances for full access by UNDP staff and international experts. (...)

It shall be noted that the selection criteria defined in the ProDoc are even more detailed. Here only a small extract of the selection criteria definition is given.

With these selection criteria MoLEP has been undertaken a site selection process with SHMA under coordination of NCC, which led to the selection of the following counties for the development of the project. Some of the locations of the project, namely the sites visited in the context of the present review, derived from the available information can also be found in Annex 4. Based on the selection criteria defined in the ProDoc the following sites have been selected:

- **Kaechon City, South Pyongan Province**
  1. Alil-ri and
  2. Joyang-dong;
- **Pakchon County, North Pyongan Province:**
  3. Sinpyong-ri and
  4. Maenjung-ri;
- **Taechon County, North Pyongan Province:**
  5. Songtae-ri.

The two Ri's located in the South Pyongan Province, Alil-Ri and Joyang-dong have been selected as Pilot Ri's defined in the ProDoc, in which the full set of interventions is implemented to develop and demonstrate project intervention capabilities to achieve the proposed objectives.

## 2.4 Stakeholders and project implementation arrangements

In this chapter an overview over the project implementation arrangement is given. For that purpose the relevant line ministries and their roles in the project are described. It shall be noted that DPR Korea is a highly centralized country, which gives the central power concentrated in the capital Pyongyang an important role in all activities in the country.

### **2.4.1 MoLEP**

MoLEP is the ministry responsible for the country's land and environmental protection. To fulfill this task there are a number of departments with different core competencies and tasks. The departments involved in the SERCARB project are the Land Usage Monitoring Unit, the Forest Protection Department as well as the Environmental Protection Department.

Being one of the national counterparts the rehabilitation of forest areas has been a core activity since 2015. MoLEP understands as one of the main project aims the recovery of degrading forests and the improvement of the livelihood of the population in the project area, using the integrated approach as described in the ProDoc. This approach involves all levels of the ecosystem starting from the upper part of the mountains with its forests, over the sloping lands used for agroforestry and agricultural activities down to the riverbanks.

According to MoLEP the FMB owns the Awareness Center in Joyang-dong, which is a specific county level MoLEP unit focused on forest management and protection. On local (below county) level these functions are conducted by the FMB substations, which are the local implementation organizations, formed normally by a head of Substation and some rangers under his/her command. The FMB plays an important role in this project as it serves very much for dissemination of the project outcomes and helps to raise the awareness on the project topics at local as well as national level.

### **2.4.2 SHMA**

SHMA is responsible for implementing the national policy and conducting systematic survey and research on meteorology, hydrology and oceanography. It also maintains operational hydrometeorological observation network for meteorology, climate, river, lake, reservoir and ocean with the purpose of performing weather forecasts, flood forecasts, agricultural outlooks, climatic predictions and environmental monitoring for the government and the public in general.

As analyzed in the ProDoc the County Level is lacking technical capacity to collect data and to do proper county level forecasting. Due to this the main focus of SHMA is to strengthen the county level capabilities as well as to build a community based EWS, which is fed with additional data from AWS and measurement stations, that help to improve the quality of the forecasts made by SHMA.

### **2.4.3 SLUG**

Even though not an institutional stakeholder in the project the SLUGs play an important role in the implementation and sustainability strategy of the project. Therefore they are presented here as well.

Established in the 1980s the Sloping Land User Groups are members of a village responsible for the usage of the sloping land in the lower parts of the mountains. The SLUGs are a nationwide institution and exist in all rural communities. Members are mainly housewives that are willing to join and to collaborate. According to the information given during the interviews the SLUGs decide who can become a member.

Main role in the project is to disseminate the knowledge generated in the project and make sustainable usage of the sloping land by introducing new agricultural techniques.

## **2.5 Project timing, milestones and activities**

In the following subchapters overview over the original project timing, milestones and activities is given and contrasted with the actual on-ground project implementation.

### **2.5.1 Project timing and milestones**

Originally planned as a 3.5 years project the ProDoc defined a series of milestones for each output and year. Those were the following:



	2013	2014	2015	2016
<b>Output 1</b>	Community entry and initiation activities completed. Participatory hazard mapping training module designed and localized. Pilot hazard mapping activities commenced in at least two locations in one project site.	Localized disaster reduction planning methodology developed, and project staff trained. Initial hazard mapping completed in at least two locations, and disaster reduction planning commenced. Additional project site identified, and community entry and hazard mapping activities commenced.	Follow-up training and refinement of methodologies undertaken.	By end-project, community hazard maps and disaster reduction plans have been completed in at least four locations in two sites, and the plans are being implemented by local committees.
<b>Output 2</b>	Needs assessment for hydrometeorological and agrometeorological monitoring system completed. Pilot EWS installed in at least four locations, and training initiated for local community users.	Systems and capacities in place for county-level collection and analysis of meteorological data from pilot EWS.	Data and reports from pilot EWS locations being incorporated into county- and ri-level agricultural planning and river basin management by Ri managers and lowest technical staff from the relevant ministries dispatched to the villages.	County and ri-level Peoples Committees in pilot locations have demonstrated capacity to monitor and analyze local weather information, and incorporate these into agricultural, water management and disaster early warning processes.
<b>Output 3</b>	Field surveys of pilot watersheds completed, and priority rehabilitation sites identified.	Priority rehabilitation, slope stabilization and reforestation activities undertaken in collaboration with local communities.	Management plans and county action plans for pilot watersheds completed and under implementation.	Rehabilitation activities undertaken in all priority risk sites, and overall watershed area subject to deforestation, degradation or slope instability reduced by 20%.
<b>Output 4</b>	Pilot site areas (sloping lands at risk of degradation and soil erosion) identified, and Sloping Land User Groups established. Initial site and needs assessments undertaken.	Participatory livelihood assessments undertaken with target beneficiary groups (SLUGs) and alternative livelihood and energy access plans developed.	Alternative livelihood and energy access plans under implementation with at least 500 beneficiary households.	Sustainable management of sloping agricultural lands demonstrated in at least four ri in two counties, resulting in improved livelihoods and energy access for at least 450 households.
<b>Output 5</b>	Project management structures in place. Initial capacity assessments for local partners undertaken and initial training plans developed.	Project delivery rate meets or exceeds CO average. Initial training activities completed. Detailed site-specific capacity assessments conducted and training plans developed.	Project delivery rate meets or exceeds CO average.	Project implementation completed on time and all key outputs delivered. Project evaluation show specific and quantifiable increase in RP and LP capacities against baseline and detailed targets established during project inception.

**Table 4** Yearly project targets as defined by the ProDoc

It must be noted here again that the project suffered from a delay of 1.5 years, which left only a 2 years implementation period in which most of the milestones were reached and even some further activities have been performed, which were originally not mentioned in the AWP.

The yearly project targets have been revised and adjusted to the pace of the project. Main change was the reduction of the original time frame from 3.5 years down to 2 years, which have been further reduced to 1.5 years. These changes are reflected in the below table and the new targets served as guidance for the PM as well as base for the quarterly monitoring reports.

	2015	2016
<b>Output 1</b>	Community entry and initiation activities completed in 1st site Participatory hazard mapping and disaster reduction plans started and completed in two locations (county / city level) of 1st project site 1 additional project site identified	At least 3 community disaster reduction plans initially implemented
<b>Output 2</b>	Needs assessment for hydro-meteorological and agro-meteorological monitoring system completed. Pilot EWS installed in at least four locations, and training initiated for local community users.	2 flooding forecast and EWSs set up at least in 2 counties providing quality and timely weather forecast and early warning services
<b>Output 3</b>	Field surveys of pilot watersheds completed, and priority rehabilitation sites identified. Management plan and county action plan for pilot watersheds completed	20% estimated reduction of deforestation, degradation or slope instability with 5000 ha of forest and sloping lands reforested or rehabilitated (jointly with output 4)
<b>Output 4</b>	Pilot site areas (sloping lands at risk of degradation and soil erosion) identified, and Sloping Land User Groups established. Initial site and needs assessments undertaken. Participatory livelihood assessment undertaken with target beneficiary groups (SLUGs) and alternative livelihood and energy access plans developed.	5000 ha of forest and sloping lands reforested or rehabilitated, reducing deforestation, degradation or slope instability by 20% (jointly with output 3) 500 households improved access to livelihood and energy
<b>Output 5</b>	Project management structures in place. Initial capacity assessments for local partners undertaken and initial training plans developed.	Complete project management structure in place. - Project completed with all key substantive results delivered (over 95 %)

**Table 5** Yearly project targets as revised after the start of the project

## 2.5.2 Project activities

The project activities to achieve the above-defined targets, which have been operationalized by the PM in collaboration with the national counterparts included several activities with different focus. Embankments were built and forest areas were reforested to stabilize the watershed areas, by which the risk of floods has been reduced. Awareness was raised by the construction of the Community Awareness Center in Joyang-dong, which is widely used by the SLUGs and through in-country trainings and international study tours, mainly to China. Trainings and study tours have been of great importance for the project and were supported by UNDP as well as the government through their counterparts. A total of 3 In-Country training with national and international trainers were performed on Watershed Monitoring, Watershed Management and Sloping Land Management. In 2015 and 2016 3 study tours to China were conducted on Disaster Management, Weather Monitoring and Early Warning System, and Integrated Watershed Management. UNDP laid focus on the participation of community members in these capacity building activities to ensure the active and long-lasting commitment of the communities.

During the design and implementation of the project all project partners contributed with activities and contributions, which are in line with their core competences, by this taking advantage of their strengths:

While UNDP provided budget, international know-how and management capabilities through international experts national counterparts and the GoDPRK sustained and supported the project significantly through provision of in-country know-how and management capabilities available in the line ministries, which are the project partners. The project activates on ground sparked great interest in the local population leading to community mobilization, making the implementation of the project activities possible through these in-kind contributions.

These contributions include mobilization of local population during the construction of the embankments and the Awareness Center in Joyang-dong, provision of trainers and venue for in-country trainings, land for the tree nursery, dissemination activities and distribution of training materials. It shall be noted here that these contributions have the same value to the project success as the pure budget allocated by UNDP.

It shall also be noted that the GoDPRK through its different entities and at different levels initiated further activities on own expenses and initiative to support the success and sustainability of the project. Namely the further embankment activities and the construction of the second Awareness Center in Alil-Ri shall be mentioned here.

The activities and contributions by the project partners are estimated as follow:

N°	Activity	Site	Description
<b>Community contribution</b>			
1	Community hazard mapping exercises	5 pilot ris in 3 counties	600 person*days of community people engagement (about 200 community people for 3 days by average)
2	Construction of community awareness center and embankments	Joyang-ri and Alil-ri, Kaechon	at least 50,000 person*days of labor contribution by the community people
3	Int'l consultancy on watershed management	3 pilot ris in Kaechon and Taechon	250 person*days (50 community people from pilot ris in Kaechon and Taechon for 5 days)
<b>Government contribution</b>			
4	Inception workshop	Kaechon	18 person*days (9 facilitators / presenters from MoLEP and SHMA for 2 days)
5	Community hazard mapping exercises	5 pilot ris in 3 counties	8 person*days (2 people for 4 days from CBS for translation of questionnaires and field survey manual)
6	Training on weather monitoring	Pyongyang	14 person*days (14 facilitators / presenters from SHMA)
7	Int'l consultancy on weather monitoring and EWS	Kaechon and Pakchon	35 person*days (5 people from SHMA and counties for 7 days)
8	Int'l consultancy on watershed management	Kaechon and Taechon	50 person*days (5 people from MOLEP and counties for 10 days)
9	Training on watershed management		25 person*days (5 facilitators from MoLEP system for 5 days)
10	Community awareness center	Joyang-ri, Kaechon	around US\$ 1,000 for the electricity appliances and US\$ 2,000 for facilities of heating, water supply, sewage drainage, ventilation, etc. by County Forest Management Board.

**Table 6 Estimated Community and Government contribution in 2015**

N°	Activity	Site	Description
<b>Community Contribution</b>			
1	Rason post-flood rehabilitation	Sonbong area, Rason City	48,000 person-days of labor contribution for 2,000 meters (both sides) of embankment
			12,000 person-days of labor contribution for 5 greenhouses
			about 10,000 person-days of labor contribution for nursing, transplanting, growing, etc.
2	Embankment and water-course clearing	Songtae-ri, Taechon County, North Pyongan Province	about 30,000 person-days of labor contribution for strengthening of embankment, clearing of watercourses and gully check dam
		Joyang-ri and Alil-ri, Kaechon City, South Pyongan Province	about 30,000 person-days of labor contribution for reinforcement of embankment and gully check dam
			about 3,000 person-days of labor contribution for transplanting, growing, etc. of fast growing trees
3	Sloping land rehabilitation and livelihood improvement	Songtae-ri, Taechon County, North Pyongan Province	about 2,500 person-days of labor contribution for transplanting, growing, etc. of young fruit trees
		Joyang-ri, Kaechon City, South Pyongan Province	about 2,000 person-days of labor contribution for transplanting, growing, etc. of young fruit trees
		Alil-ri, Kaechon City, South Pyongan Province	about 2,000 person-days of labor contribution for transplanting, growing, etc. of young fruit trees
4	Embankment in coal mining section	Joyang-ri, Kaechon City, South Pyongan Province	about 40,000 person-days of labor contribution for 2,000 meters (both sides) of embankment

N°	Activity	Site	Description
<b>Community Contribution</b>			
5	Food processing facility	Joyang-ri, Kaechon City, South Pyongan Province	About 2,000 person-days of labor contribution for construction and finalization of the building
<b>Government Contribution</b>			
6	Food processing facility	Joyang-ri, Kaechon City, South Pyongan Province	around US\$ 5,000 for construction materials and US\$2,000 for accessories and small tools were procured and installed by County Forest Management Board.
7	Facilitation of in-country training on sloping land stabilization and tree plantation	Joyang-ri, Kaechon City, South Pyongan Province	provision of 7 trainers, accommodation and meeting room (about 5,000 USD reduced)
8	Publication of awareness materials		about 60 person-days of experts contribution for drafting, translating and editing

**Table 7 Estimated Community and Government contribution in 2016**

As shown above and proven by the monthly monitoring reports the commitment of the communities and the government is very high. The total beneficiary number, benefiting from the projects activities is estimated to be about 77,500 people, including 42,500 in three pilot Ris and alongside the rivers embanked in Kaechon and Taechon plus 35,000 people in and nearby Sonbong area in Rason city.

### 3 Findings

The present chapter collects the findings from the assessment from which the recommendations for the future of the project are derived. These findings assess the project design from a high level and the progress of the project with regards to the intended results. A critical look into the project implementation is done as well. Furthermore the sustainability of the project is assessed in different dimensions to detect possible threats to intended sustainability of the project interventions.

#### 3.1 Project Strategy

In this chapter the project strategy is assessed with regards to project design and the adapted results framework. It is also assessed how good the project has been designed and if it is responsive to the countries development strategy and priorities.

##### 3.1.1 Project Design

As per ProDoc the problem addressed by the project is the increasing impacts of climate change and environmental degradation at different levels that have a negative impact on peoples livelihood in rural areas. To help DPR Korea to tackle and solve these problems in the future, the project selected a multilevel and integrated approach focusing on strengthening the technical capabilities to adapt to climate change at county, county and community level. The focus of the project interventions was therefore laid on these levels. Main interventions of the project are focused on the sustainable and integrated watershed management, which includes reforestation, river embankment, both with the intention to reduce the risk of severe (flash-)floods. Ownership of the local population is assured by acting upon the sustainable usage and income generation of the sloping lands in the project communities. On top the implementation of a county level weather monitoring and EWS was planned to reduce the direct negative impact of (flash-)floods upon the local population. The focus of this weather monitoring and EWS is the improvement of weather forecast service and early warning capabilities to reduce the impact of the disasters.

Seen the design and the selected approach it is a very effective route towards the intended results as the project, unlike other projects, is based on an integrated approach rather than addressing in an isolated way one of the problems encountered in the project sites. During the In-Country mission it has been assessed that the lessons-learnt from other projects have been properly incorporated into the project design based on previous experience and actions undertaken by other international agencies, which have been working on reforestation or sloping land management in recent years such as the Swiss Development Cooperation amongst others.

As a side note the projects implemented in DPR Korea by UNDP seem to have an adequate approach towards the identified problems and the right selection of tools and methods to be implemented. This can be noted by the additional activities on county level with regards to further embankments initiated without projects intervention. These initiatives show that the techniques and approaches can be replicated purely by in-kind contribution and activities by DPR Korea own resources.

The project fits into GoDPRK general policy and strategy as deforestation and land degradation has been identified as a serious threat to socio-economic development in rural areas. This became even more visible through recent disasters like the floods that hit Rason last year in the northern part of the country. Through the present project UNDP DPRK has been involved in the response measures offered by the international community as well by mobilizing additional budget of \$US100,000 to help DPR Korea to overcome the impacts of this flood event.

Ownership of project is considered as good, given the fact that the relevant national stakeholders are involved in the implementation of the project and the project aims are to a high degree identical with the Line Ministries priorities. This fact can also be seen in the complementary actions and activities driven by MoLEP and the PC, namely the construction of further embankments as well as the construction of the second Awareness Center in Alil-Ri.

Gender issues have been addressed during project design by focusing on the SLUGs, mainly formed by women that are most affected by the floods and landslides, affecting the land managed by SLUGs.

**The Project Design is considered as very adequate to respond to the problem defined in the ProDoc.**

### 3.1.2 Results Framework

As suggested in the guideline for MTR [1] it is advisable to assess the projects indicators and targets and determine how “SMART”<sup>4</sup> they are. As it can be seen in chapter 3.2 most of the targets and indicators defined in the ProDoc fulfill the criteria and are “SMART” as defined above. During the review two exceptions from this evaluation were identified, which have been subject to long discussions with NCC, UNDP and MoLEP during the Joint workshop conducted during the In-Country mission.

For Output 3 and Output 4 the ProDoc the indicators to measure the success of the project are the reduction of deforested land as result of reforestation as well as the increase of areas under sustainable land management. The targets to be achieved by the project have been assessed during the 6<sup>th</sup> PSC meeting in June 2016. In this meeting the targets have been further defined, without completely solving the inherent problems of its definition. Problems rose from the definition of the baseline as well as the procedure to assess the area of land that fulfills the above-described criteria. During the workshop as well as the working meetings it has been suggested to further revise these indicators and adapt them for the envisioned project extension. PM has provided further explanations of the targets and indicators, which lead to a better understanding of the rationale behind. Even though it is suggested to revise the targets and indicators for Output 3 and Output 4 for the project extension period.

The project objectives as well as the outputs are well defined and feasible within the suggested time frame. This is especially true, when taking into account that the project implementation time was reduced from 3.5 years to 2 years only, time in which most of the planned activities took place in the Pilot Ri's and further counties were included to adopt the same actions as in the two Pilot Ri's. Nevertheless it shall be noted that the Output 2 lacks progress due to external factors described above. Induced by the recently tightened sanction regime it has not been possible to purchase the equipment necessary to build the planned EWS on county level.

During the In-Country mission and the interviews with the beneficiaries it has been clearly noted during the field visits that the project catalyzed beneficial developments. These beneficial developments are twofold:

First of all due to direct project impact, amongst others the embankments built with project budget, the construction of the Awareness Center in Joyang-dong as well as the Fruit-Tree plantation observed in Alil-Ri, etc.

Secondly the project led to further activities undertaken on behalf of MoLEP and the county level government, namely the PC, on its own account and with own budget. Two of these activities were the further embankment of the lower part of the river in the Pilot Ri's as well as the construction of a second Awareness Center in Alil-Ri, taking into account the good experience from the Awareness Center in Joyang-dong

Seen the above it will be beneficial to revise the indicators and output targets for the extension to account the impact of these activities and to improve the handling and measurability of the selected indicators.

**The Results Framework is adequate for the project, but shows some room for improvement for the extension of the project with regards to target definition and defined indicators.**

## 3.2 Progress Towards Results

In this chapter the results achieved up to the date of the review are assessed against the indicators defined in the ProDoc, taking into account the specific conditions of the project. Based on these findings it is assessed which targets are realistic for the extension of the project.

A detailed overview over the progress towards results, benchmarked against the indicators defined in the ProDoc can be found in the Annex 3. The following paragraph gives a narrative description of the progress per Output.

In brief the Outputs 1 is achieved.

<sup>4</sup> **S**pecific, **M**easurable, **A**ttainable, **R**elevant, **T**ime-bound

The achievement of Output 2 lacks behind time, due to external reasons, but is seen on a good way towards implementation even though no experience have been gained yet on the EWS system as no such system is installed by the date of this report.

There is a certain risk to not successfully achieve the project objective in that area. Main reason is the envisioned purchase of equipment, which could fall under the sanctions put in place by the UNSC and bilateral sanctions implemented by the USA and EU. The project implementation was hit by the sanctions itself as well as the close of the UNDP bank account, which made in-country purchase impossible.

Backed with additional information of the PM and MoLEP the Output 3 and Output 4 are achieved in the Pilot communities. The understanding here is that the project supports the local communities in the rehabilitation of deforested and land which shows signs of degradation and slope instability as well as support the sustainable management of agricultural land. This means that the project activities are not the only interventions taking place, but are complementary to reforestation and embankment exercises driven by other stakeholders. It is acknowledged that the project selected an integrated approach, which benefits in a very efficient way the target communities and supports the local capacity of reforestation and rehabilitation.

It is noted that some of the indicators are not well chosen in the sense that those are hard to measure and shall be modified for better measurability and clearness for the envisioned extension of the project. Namely the following problems were identified during the working meetings with MoLEP, SHMA and UNDP:

For Output 3 it is not clear what is the reference against which the increase in area that show no sign of deforestation, degradation and slope instability shall be measured. As per ProDoc the envisioned target reduction is defined as to be 20% estimated reduction of deforestation, degradation or slope instability with 5000ha of forest and sloping land reforested or rehabilitated. As the delimitation of the areas is difficult it makes it is difficult to assess these figures. A recommendation for revision of targets for these two outputs is given in chapter 4.1.

For Output 4 a similar problem has been encountered. Here the indicator according to the ProDoc is the “Area of agricultural land brought under sustainable management as a result of project activities”. Unfortunately no target area size has been defined, making it therefor impossible to measure the results. This target has been further modified in the 6th PSC meeting and reads now as follow: Area of agricultural land brought under sustainable management increased by 20% as a result of project activities. This definition specifies the target a little bit better, but makes it still difficult to measure.

From the Field Visits as well as during the workshop and working sessions it has been seen that the project is well received and implemented in the Pilot communities Joyang-dong and Alil-Ri, even beyond the “hard” indicators as defined in the ProDoc. Main success of the project are stabilization of sloping lands with improved embankments, raised awareness through trainings performed by and through the SLUG in the Joyang-dong Awareness Center, increased income opportunities through the project activities such as fruit tree planting, honey production, food processing machines amongst others.

Output 5 lacks behind the set targets, with a delivery rate below the planned 95%. This is not critical for the moment as the reasons for it are external and according to UNDP CO the banking channel will be established soon, resuming normal UNDP DPRK operation and by this being able to achieve the set goals.

### **3.3 Project Implementation**

As stated in the ProDoc the SERCARB project is directly executed and implemented by UNDP, giving UNDP a much bigger role in the management, operation, monitoring and accountability of the project. The implications of a direct implementation are basically that (i) for the Reporting on Progress towards Achievement of Results the Resident Representative is accountable to UNDP Administrator and that (ii) for Government Coordinating Agency and for Documenting Prudent and Proper Use of Resources the Resident Representative is accountable to UNDP Administrator.

This means that UNDP is much more involved in the daily implementation work as if for other types of implementation.

### 3.3.1 Work planning

From the start the project has been delayed and suffers continuous problems, which are related to the DPRK context. Main reason for the delay was that for some time it was not possible to find a PM for the project. Only beginning of Q2 2015 the present PM took the role of PM for this project as well as for a second UNDP DPRK project, managing in this way two projects at the same time.

As it can be seen in the Quarterly Monitoring Reports available from Q1 2015 until Q2 2016 the ProDoc results framework was intensively used for the planning of the interventions within the present project. By these Monitoring Reports, backed up with intense Site Visit activities the progress of all UNDP DPRK projects is continuously checked against the defined annual targets and adaptations are made on a practical basis to achieve the envisioned targets.

**The Work planning implementation is considered Highly Satisfactory.**

### 3.3.2 Finance

Started with an original budget of \$US 2,200,000 for the whole project period of 3.5 years the project has spend up some \$US 1,140,000 until end of 2016, which is more than half of the original budget. Strong financial controls are an inherent part of any UNDP project in DPR Korea and are implemented into this project as well. Continuous follow up on the expenditures is ensured and any flux of money is backed up with invoices at all time. Likewise a very thorough follow up is part of the implemented M&E framework, which makes it possible to follow all cash-flow at any time and determine where the budget has been spent. These information are reflected in the quarterly monitoring reports made accessible to the IC and are consistent and in line with the consolidated and finalized CDR presented for 2015 as well as the intermediate CDR for 2016.

Considering the delivery rates these do not look very high at a first glance with 72% for 2015 and some 42% in 2016 according to the preliminary CDR. Seen the difficulties the project faced these numbers can be justified perfectly. With a delayed start in March 2015 it was not possible to finalize all works planned in 2015. In 2016 UNDP DPRK operations was hit hard by the close of the banking channel in March 2016, which forced UNDP DPRK to change to cash conservation mode, which reduced nearly all UNDP activities to a minimum and still are a threat to UNDP activities in the country.

**The effectiveness of financial planning of the project is under the given circumstances Highly Satisfactory.**

### 3.3.3 Project-level monitoring and evaluation systems

The M&E plan developed for the project assures a very close monitoring of the project activities. The project team presented the Quarterly Monitoring Reports to the author of this report as well as the Field Monitoring reports, the Annual Progress Report 2015 and the relevant baseline survey, which has been conducted for the SERCARB project in summer 2015 to assess the socio-economic baseline of the project. Field Visits were performed nearly on a monthly basis, which enabled an excellent follow up on the achievements and progress and allowed the PM to gain a full picture of the activities happening on ground.

The used M&E methodologies provide an excellent toolset for the assessment of the ongoing project activities, making it possible to assess the projects progress towards the expected results. Even though the selected tools provide the necessary information to monitor and evaluate the project, it has been noted that sometimes the indicators of the ProDoc are not really used, especially when dealing with area of land. Nevertheless M&E activities are efficient as they give a very good overview over the project progress and enables the UNDP PM to intervene and take management actions if required.

**The implementation of the project-level monitoring and evaluation system is considered as Highly Satisfactory.**

### 3.3.4 Stakeholder engagement

The UNDP project team works in close cooperation with the main stakeholders of land administration and agro-meteorological weather forecasting, MoLEP and SHMA on national level, down to the county level. As proved during the In-Country mission the working cooperation atmosphere is good and trustful with high level



of professionalism on both sides. The cooperation with the relevant stakeholders on sub-national level (Province, County and Ri / village) is high and commitment to the project aims and objectives is given at all levels.

Both local and national government stakeholders support the objectives of the project as the projects objective is in line with the overall objectives of MoLEP and SHMA. Both project partners play an active role in the decision-making processes that supports an efficient and effective project implementation.

Public awareness of the project is excellent on local level and good on higher level. On local level the key stakeholders, especially the SLUGs are continuously using the installations of the project. They also play a key role in the awareness raising and dissemination of knowledge through continuous trainings and informative events for which the Awareness Center is used. On a broader (national) level the awareness is less, mainly through the stay of 55 students from the Faculty of Earth Science in the Awareness Center, who have been doing field works, seminars and lectures in 3 groups, each of them staying for at least some 3 weeks on site.

The public awareness was also raised through a nationwide coverage of the project interventions on 13<sup>th</sup> of July 2016 on national television. It is noted that this type of awareness rising might be increased to have impact on national level as well.

The project design with regards to stakeholder engagement was well chosen and implemented by all project partners in the sense that each project partner could contribute to the project in the most optimum way: While UNDP provided budget, international know-how and management capabilities through international experts, the GoDPRK and national counterparts sustained and supported the project significantly through provision of in-country know-how and management capabilities available in the line ministries.

It shall be underlined here as well that the project activates sparked great interest in the local population leading to community mobilization, making the implementation of the project possible. Without this mobilization the embankments as well as the construction of the Awareness Center in Joyang-dong would not have been possible and it shall be noted that these contributions have the same value as budget allocation as provided by UNDP to the project success.

It shall also be noted that the GoDPRK through its different entities and at different levels initiated further activities on own expenses and initiative to support the success and sustainability of the project. This support can be seen namely in the further embankment activities, the construction of the second Awareness Center in Alil-Ri as well as the provision of trainers and venues for various trainings conducted within the SERCARB project.

**The relevant stakeholder engagement at all levels of the project is Highly Satisfactory.**

### **3.3.5 Reporting**

According to the presented documents the reporting from the PM to the PSC was done regular, as planned every quarter, which enabled a good and close steering of the project. Likewise adaptations necessary with regards to targets and plans have been communicated through these meetings between PM and PSC.

**The reporting from PM to the stakeholders, national partners and NCC is Highly Satisfactory.**

### **3.3.6 Communications**

From the in-country mission as well as from the desk-review it has been learnt that the internal project communication with the relevant stakeholders is close and continuous, even considering the communicational barriers in DPRK. As far as it could be assessed all relevant stakeholders are communicated the same way and do have access to the same type of information with regards to the project.

Regarding external communication the project has been printing and disseminating some 6,000 copies of training material to raise the awareness of the direct target population as well as the public in general. Nationwide campaigns are not very frequent, but the project activities have given footage on 13<sup>th</sup> of July 2016 in the national TV, something that also helped to raise the awareness. Community awareness raising and capacity building through training and communication materials are the major activities planned in 2016, however, as stated above, under cash conservation mode by the Country Office due to the close of the banking

channel, these activities were not possible to happen, here a broader outside communication of the project might be considered.

**The communication strategy of the project is Satisfactory.**

### **3.4 Sustainability**

During the project formulation phase a detailed risk analysis has been performed. Likewise in the exit strategy sustainability of the project has been addressed. Overall the risk analysis as well as the considerations with regards to sustainability seem to be well addressed and adequate. Nevertheless there is some room for improvement, especially with regards to financial risks to sustainability. In the next chapters the sustainability of the project in its different dimensions is analyzed.

#### **3.4.1 Financial risks to sustainability**

Driving question in this dimension of sustainability is to assess what is the likelihood of financial and economic resources not being available once the UNDP assistance ends. Here all different levels and financial sources that support the project activities shall be assessed.

It is noted that the project fits well into the country and line ministries strategy, which is a very good starting point for financial sustainability. Likewise the initiatives taken by the PC and the FMB, which were not project supported and/or financed show that the GoDPRK and the line ministry MoLEP are keen to further invest into the project target region as well as in the same activities in other counties.

A financial risk identified during the review was mainly for the activities under Output 2, which is the development and implementation of county level EWS. The risk identified here is financial, meaning that SHMA might not have sufficient resources to regularly maintain, calibrate and replace the sensors and systems installed for the EWS. The risk is also logistical as it might occur that the purchased sensors and systems cannot be purchased after the end of project due to sanction regime limitations. Both topics shall be addressed and dealt with by the PM as well as SHMA.

**The Financial Risk to Sustainability is considered Medium.**

#### **3.4.2 Socio-economic to sustainability**

Taking into account the above said as well as the fact that the project activities are in line with line ministries general strategy and the country priorities there is little risk to sustainability from socio-economic factors. The involvement and commitment to the project objectives and aims of the key stakeholders SHMA and MoLEP is considered high and it is also noted that some of the activities MoLEP is responsible for in the context of this project have a long track record in the international cooperation with DPR Korea, as there have been projects with similar activities from the Swiss Cooperation as well as Unit 4 of the EU.

During the in-country mission it has been noted that the involvement and ownership of local population on community is high. This is mainly due to the fact that the project activities have a direct positive impact on the life in the Pilot Project region. These positive impacts are threefold:

First of all by project interventions that help the SLUGs to generate additional income or better access to food through the food processing machines and activities for further food production such as animal husbandry, honey bees and the fruit tree planting.

Secondly the reforestation activities as well as the embankment activities reduce the probability of losses of properties (land and thus grains) and lives (people by riversides need not move to other places) due to extreme weather conditions.

Thirdly the EWS, once implemented allows a better reaction on flood events, by that reducing the losses of any weather-induced disaster that may occur.

**The Socio-economic Risk to Sustainability is considered Low.**

### **3.4.3 Institutional framework and governance risks to sustainability**

As described above the project fits well into the country and line ministries overall strategy. In that sense little risk has been identified from the institutional framework and governance. Thus the risk here is considered as low.

NCC raised a general issue, which represents a risk originating from the UNDP DPRK internal operational framework. DPR Korea is a highly centralized country with most of decisive power centralized in Pyongyang. UNDP DPRK does not work on projects that act directly at this level, but rather on local level, with projects that have a direct benefit to local population. Due to this setup the cooperation between UNDP and NCC is noted to be jeopardized, even though the working relationship between both entities is good. This does not compromise the present project, but is raised continuously in discussions between NCC and UNDP DPRK.

In the end this general risk cannot be completely mitigated, but shall be kept in mind by the PM during the further implementation of the project.

**The Institutional Framework and Governance Risk to Sustainability is considered Low.**

### **3.4.4 Environmental risks to sustainability**

Main risks in this category are extreme environmental phenomena such as flood and other natural disasters. Up to now none of these occurred. It is noted that UNDP PM is well aware of the risk and working continuously with the project partners in the assessment of these risks. The risk is somewhat mitigated by proper actions of the project partners. One example is that the seedlings from the nursery in Alil-Ri have been moved to a lower area because of severe climatological conditions at the location of the nursery in the mountains.

**The Environmental Risk to Sustainability is considered Medium.**

## **3.5 Overall Evaluation**

In general terms the findings of the present project, presented in the above section, analyzing the different dimensions and backed with the evaluation matrix in Annex 3 show a well-designed and implemented project. Under the assumption that the project is given at least a one-year no cost extension all indicators point to a successful project finishing.

The achievements reached so far and especially the successful demonstration of the techniques and approaches as well as the additional activities initiated by the GoDPRK, the project partners on national level as well as the initiatives induced by the project on provincial and county level qualify the project for an additional extension to include more project sites at which the techniques and approaches will be implemented.

## 4 Lessons learnt, Conclusions and Recommendations

In this chapter the main conclusions and recommendations for the project are presented. These recommendations have been synthesized from the desk study of documents and backed up during the In-Country mission, which took place from 29<sup>th</sup> of November until 08<sup>th</sup> of December 2016.

### 4.1 Lessons learnt

Throughout the project there were significant opportunities for learning lessons for the implementation of the project in general as well as other projects initiated and managed by UNDP DPRK. The present review identified the following lessons learned:

- Two years is a too short period to demonstrate the full success of the present project. One-year no cost extension will be very important for the project success and to finalize the activities under the present ProDoc.
- Early recruitment of project team is crucial for the success of any project. One of the reasons for initial delay was the late formation of the project team;
- The SERCARB project is an excellent example of best practice in several aspects, including, capacity building, sustainability, target population participation and mainstreaming;
- The time invested into project design, was valuable for ensuring effective project formulation, planning of meaningful activities around the proposed targets and for facilitating implementation;
- Good organization of international and national level project management is key for the success of any project. This is achieved through regular communication, monitoring of results, and clear follow-up actions whenever potential problems are identified;
- Wherever possible and meaningful participatory approaches and techniques are key elements for sustainability and success of projects that work directly with target population;
- Continuous review of key outputs and targets enables fast and high quality assessment of the project. Some of these targets have not been followed always in a consistent way by the project team
- The project clearly demonstrated that the problems described in the ProDoc can be best and sustainably addressed with an integrated approach that takes into account all aspects and levels of a watershed rather than focusing on isolated solutions;
- The problems identified in the ProDoc being a problem for the whole country it has been good practice to design the project around some two Pilot Site in which an adapted methodology and approach has been developed that was thereafter implemented in additional sites and watersheds;
- Through the successful implementation of key project features further initiatives can be initiated. That was successfully shown by the project for the embankment activities as well as the newly build Awareness Center built in Alil-Ri;
- Further project development and sustainability depends very much on the continuous revision of MoLEP and SHMA capabilities and the ability of project partners to adapt to new (external) conditions and requirements;
- Especially in the context of DPRK fast clearance of the specifications is necessary to avoid unnecessary delays in the project implementation. This topic has been addressed by the BRH through a system of clearance pre-check;

### 4.2 Conclusions

The project is assessed as an overall successful project with well-selected tools and approaches, which respond to needs formulated in the country. The overall outlook for the extension period is very positive as the project demonstrated to deliver even under the harsh and difficult conditions the project is developed.

It is therefore and to assure the sustainability of the implemented project activities advisable to extend the project by the requested 2 years with an additional budget of up to \$US 5Mio.

### 4.3 Recommendations

In this chapter the recommendations derived from the findings and the lessons-learned are derived. These recommendations are meant to help PM, the CO and the PSC to steer the future path of the project. Saying that these recommendations are not mandatory to implement, but provide some indications how the project can be made better and more sustainable. Ultimate decision with regards to the way forward has to be taken by the PSC and the PM.

#### (1) Additional time for project activities needed

As analyzed throughout the present report the lack of achievement with regards to Output 2 and Output 5 is purely due to external factors, namely the closing of the UNDP banking channel earlier this year, which made it impossible to all UNDP

#### (2) Replicate the methods and approaches developed in an extension of the project in other communities

In the last formal working meeting with UNDP, MoLEP and SHMA the participants expressed the wish that the extended project shall have two focuses:

The first focus shall be on the existing project counties, further strengthening, improving and deriving lessons-learned from the project activities undertaken so far, by including additional Ri's along the same river and by further improve the interventions undertaken in the five communities during the first project phase until 2016.

The second focus shall be laid on project regions outside the Pilot County and along other rivers, in which the activities from the Pilot Ri's are replicated based on an assessment of the project region needs and capabilities.

#### (3) Maintain developed Methodology and implementation scheme

As seen through the commitment of local communities as well as Line Ministries the selected participatory approaches are key for sustainability as a higher degree of ownership and awareness can be achieved. Seen the results for Output 1 it is therefore highly recommended to maintain the methodology and implementation scheme used for the different outputs.

#### (4) Review Output targets and indicators

To improve the operational handling of the project it is advisable to further review and redefine the targets and indicators for the Outputs 3 and Output 4 for the extension period, as some of the selected indicators were hard to use for the present assessment as these leave a room for interpretation. Namely the definition of areas is not done in a way easy to understand. Thus the following change is suggested based on joint discussions with NCC, UNDP and Line Ministries as well as discussions with the PM:

- Output 3 Target:** (1) By the end of the project the area of pilot watershed area, with evidence of deforestation, degradation and slope instability is reduced to half;  
(2) By the end of project the capacity of the project communities to successfully undertake reforestation activities is strengthened;
- Indicator:** (1) Percentage of rehabilitated land;  
(2) Total number of seedlings appropriate to local climate and survival rate of planted trees;
- Baseline:** (1) Hectares with sign of evidence of deforestation, degradation and slope instability to be assessed in the first year of the extension of the project.  
(2) Nursery capacity as well as initial survival rate of seedlings to be assessed in the first year of the extension of the project.

For Output 4 only end-of-project target shall be revised as follow:

- Output 4 Target:** An additional 20% of land in the pilot communities, which is currently not under sustainable management is under sustainable management by the end of the project.

It is important to define realistic targets during the inception phase of the project. These targets shall be realistic, but also challenging at the same time. It is important here to stress that during the inception phase realistic targets are defined for each county in which the project will be deployed.

**(5) Ensure coordination between project induced and stakeholder induced activities**

During the discussions with UNDP and the Line Ministries question was raised how integrated and coordinated the interventions from UNDP and the PC take place. As no final answer could be given to this aspect it is advisable to have a closer look onto possible negative side effects especially of the embankments driven and financed by the UNDP and the embankments driven and financed by the PC. This shall be integrated into the new ProDoc for the extension.

With regards to sustainability it is recommended to assess all used techniques and approaches again for their suitability in the DPRK context. Namely they shall be selected keeping in mind that they shall be accessible and easy to purchase after the project has finalized, taking into consideration the existing sanctions and trade barriers in DPRK. All techniques and approaches shall also be easy to use in the given context, explicitly not ruling out technically or technologically sophisticated solutions.

**(6) Consolidate and strengthen MoLEP and SHMA capacities further**

With regards to the activities MoLEP is responsible for it is recommended to consolidate and strengthen the nursery capabilities as well as diversify the available seeds to be used in the project areas. Likewise the forest fire fighting capabilities shall be strengthened further to ensure that this does not become a threat to the project activities in times of drought.

With regards to the EWS and AWS to be implemented it would be advisable to ensure that maintenance and repair works can be performed by SHMA as expected. It might be advisable to consider the purchase of additional hardware (bus, truck, motorcycles) to ensure that these works can be done in timely manner after the implementation of the project.

**(7) Implement the community based parts of the EWS, while waiting for purchase of equipment.**

More general the clearance procedure implemented by the CO shall be maintained over the project lifespan to ease the clearance of goods and services that need to be purchased under the project.

In discussion with the national counterparts, especially SHMA, it was also recommended to develop further those parts of the EWS, which does not need the purchase of equipment, which has been difficult since the bank channel was closed for UNDP DPRK in March 2016, and has not been opened by the time of the In-Country mission.

## **5 References**



- [1] Guidance for Conducting Midterm Reviews Of UNDP-Supported, GEF-Financed Projects, UNDP-GEF Directorate 2014
- [2] Guidance for Conducting Terminal Evaluations Of UNDP-Supported, GEF-Financed Projects, UNDP Evaluation Office 2012

## 6 Annexes

<b>ANNEX 1</b>	<b>ASSIGNMENT TOR .....</b>	<b>22</b>
<b>ANNEX 2</b>	<b>PROPOSED EVALUATION APPROACH .....</b>	<b>28</b>
<b>ANNEX 3</b>	<b>EVALUATIVE MATRIX .....</b>	<b>32</b>
<b>ANNEX 4</b>	<b>MAP OF PROJECT REGION.....</b>	<b>35</b>
<b>ANNEX 5</b>	<b>IN-COUNTRY MISSION ITINERARY .....</b>	<b>36</b>
<b>ANNEX 6</b>	<b>INTERVIEW GUIDE USED FOR DATA COLLECTION AND ANSWERS GIVEN .....</b>	<b>38</b>
<b>ANNEX 7</b>	<b>LIST OF PERSONS INTERVIEWED AND MET DURING THE FIELD VISITS .....</b>	<b>40</b>
<b>ANNEX 8</b>	<b>LIST OF REVIEWED DOCUMENTS.....</b>	<b>41</b>
<b>ANNEX 9</b>	<b>ADDITIONAL INFORMATION ON ACHIEVEMENTS OF OUTPUT 3 AND 4 .....</b>	<b>43</b>
<b>ANNEX 10</b>	<b>REVIEW RATINGS .....</b>	<b>44</b>
<b>ANNEX 11</b>	<b>UNEG CODE OF CONDUCT FOR EVALUATION IN THE UN SYSTEM.....</b>	<b>45</b>

Annex 1 Assignment ToR

**United Nations Development Programme**

*Empowered lives. Resilient nations.*

**TOR for INDIVIDUAL CONSULTANT (International)**

Mid-Term Review of SERCARB Project

<b>Project name:</b>	Strengthening Ecosystem Resilience and Community Adaptive Capacity in Climate Affected River Basins in DPRK (SERCARB)
<b>Post title:</b>	Consultant to analyze the results achieved to-date and make recommendations in support of scaling-up activities under a 2-year extension of the SERCARB project
<b>Country / Duty Station:</b>	Pyongyang, DPRK
<b>Expected places of travel:</b>	SERCARB project areas
<b>Duration of assignment:</b>	27 working days in total, of which 7 days for desk study and work plan preparation, 10 days for field work in DPRK, and 10 days for drafting and finalizing the assignment report.
	The consultant is expected to arrive in Pyongyang on / around Nov 29 and complete the field work in DPRK by Dec 9, 2016.
<b>Supervisor’s name/functional post:</b>	Stephen Kinloch Pichat, Deputy Resident Representative a. i., UNDP DPRK
<b>Payment arrangements:</b>	Lump Sum (payments linked to deliverables)
<b>Administrative arrangements:</b>	The consultant will be provided with visa issuance, airport pick up and drop off, local transport and office space in DPRK.

**Selection method:** Desk review

**1. BACKGROUND**

Due to geographical location and topography, DPRK is prone to frequent natural disasters especially the extreme weather conditions e.g. floods and droughts that are impacting negatively on people’s lives. Meanwhile due to lack of alternative energy and livelihood opportunities human activities are exacerbating the situation, for instance the severe deforestation resulted from the tree cut on forest land (at upper part of mountains) for cooking, heating, and shipment (charcoal fueled trucks), and sloping land conversion to farming land (at lower part of mountains), are causing more land slides, soil erosion, etc. leading to a vicious cycle between human activities and nature conservation.

Responding to the national development priority of improving quality of people’s lives and sustainability of the environment, a comprehensive disaster reduction project with a duration of 3.5 years entitled *Strengthening Ecosystem Resilience and Community Adaptive Capacity in Climate Affected River Basins in DPRK (SERCARB)* was signed between UNDP and the Government of DPRK in June 2013, with a total budget of USD 2,200,000 in a duration of three and half years through a direct implementation modality by UNDP. The Project aims to minimize the negative impacts of climate change and environmental degradation on the livelihoods of local community on one hand, and to improve community awareness and capacity for environment protection, sustainable management and utilization of natural resources, as well as disaster risk management and climate change adaptation on the other, so as to build a virtuous cycle thus benefiting the rural community people in the project areas.

Page 1 of 6



Through introduction of demonstrative pilots at and below county levels in the first pilot site i.e. the lower Chongchon River Basin, which covers Pakchon County (population approximately 100,000) of North Pyongan Province, and Kaechon City (population approximately 300,000), South Pyongan Province, followed with replication of successful pilot experiences to a second site i.e. Taechon County (population approximately 110,000), North Pyongan Province, SERCARB project aims to achieve the following specific outputs:

- Output 1: Community capacities for participatory hazard mapping and disaster reduction strengthened.
- Output 2: Weather monitoring and early warning systems (EWS) improved in pilot watersheds.
- Output 3: Improved forest management to reduce flood risk, landslides and erosion in pilot watersheds.
- Output 4: Sustainable utilization and rehabilitation of sloping lands in agricultural landscapes.
- Output 5: Multi-stakeholder coordination and project management

As an ad hoc component, the project also supported the post 2015 flood rehabilitation activities in Rason City, focusing on the areas of community resilience building (output 1) and livelihood promotion (output 4), with an extra budget of USD 100,000 added to the Project.

These outputs will contribute to the outcome level results in the areas of environment protection, disaster management, and climate change adaptation and mitigation that UNDP is aiming for in DPRK during its Country Programme cycle 2011-2016.

Despite the project was officially started from early 2015 due to various reasons, which means its implementation has been under normal condition within only one year (from March 2015 when it was started to March 2016 when the banking channel issue re-happened), much progress has been made so far, bringing positive impacts on or prospect for a large number of people in the project counties in different ways, with some successful experiences gathered in this process.

According to the project document (Prodoc), the project is expected to be completed by the end of 2016, and a final evaluation is required. However, given the limited time of the project implementation so far, some planned activities could not be accomplished within the project duration, thus an appropriate period of extension is needed for the project. Following the decision by the Regional Bureau for Asia and the Pacific, UNDP, a 2-year extension with additional budget needed will be granted, for the completion of the remaining planned activities in the Prodoc, as well as replication of the project’s successful elements to wider areas, benefiting for many more people esp. those in the country’s northern parts that were severely stricken by the 2016 devastating flood, if possible.

**2. MAIN OBJECTIVES OF THE ASSIGNMENT**

Considering the status of the project as mentioned above, instead of a final evaluation, this Mid-term Evaluation aims to assess the successful elements of the project, and develop proposal for its replication during the coming 2-year extension from the beginning of 2017.

**3. SCOPE OF WORK**

The consultant will undertake the following tasks,

Before the mission to DPRK (7 working days)

1. Collect and review relevant secondary information (documents listed in the annex will be shared by UNDP with the international consultant after the recruitment contract is signed, before the consultant’s field mission to DPRK)
2. Develop work plan and methodology for the assignment to be approved by UNDP.

During the mission in DPRK (10 working days)

1. Interview stakeholders from various sides i.e. UNDP, National Coordinating Committee (NCC), national counterparts, local partners, and most importantly the community beneficiaries;
2. Visit the pilot sites at the project counties and especially communities, to verify the project progress and impacts on the changes of people’s lives. Due to the long distance, the ad hoc component in Rason will not to be included in the visit agenda.
3. Analyze the progress achieved towards the intended results, esp. successful elements and experiences that deserve replication
4. Develop proposal including narrative description and results and resource framework for the extension (replication) of the project in appropriate sites and at appropriate scale, using UNDP project document template.
5. Present the major findings and recommendations (inclusive of structure of assignment report) to UNDP country office and national counterparts at the end of his / her field work in DPRK.

After the field visit (10 working days)

6. Draft, revise, finalize, and submit to UNDP DPRK the report with the objective of the assignment achieved.

#### 4. DELIVERABLES

The final product of the assignment will be a high quality report with the project’s successful elements and results achieved thus far and experiences assessed, and extension recommended for replication (including both narrative description and results and resource framework):

- By the 1<sup>st</sup> week after signing of the contract: the assignment work plan and methodology drafted and submitted to UNDP for comments and suggestions;
- By the 2<sup>nd</sup> week after signing of the contract: the assignment work plan and methodology revised and approved by UNDP;
- By the end of 10-day field work in DPRK: findings and recommendations from the field assessment work through the interviews and visits presented to UNDP and national counterparts;
- By the 2<sup>nd</sup> week after field work in DPRK: draft assignment report submitted for comments and suggestions; and
- By the 4<sup>th</sup> week after field work in DPRK: final report submitted and certified by UNDP on the satisfactory provision of services

#### 5. MONITORING/REPORTING REQUIREMENTS

The consultant will be under day-to-day supervision of UNDP country office, and works closely with SERCARB Project Manager and Monitoring and Evaluation Specialist.

#### 6. Qualification requirements

##### Competencies:

##### Functional Competencies

- Ability to produce deliverables on time
- Computer literacy and skills in presentation and report writing

**Qualifications:**

**Education**

- At least master’s degree in development, environment, disaster management or other related fields

**Experience**

- At least 8 years of demonstrable experience in both project assessment / evaluation and project formulation
- Experience in dealing with government agencies at different levels, international organizations, and community people
- Prior work experience with international organizations in DPRK or other countries in Asia Pacific region is desirable

**Language**

- Excellent communications, presentation and writing skills in English

**7. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS**

Applicants shall submit the following documents:

{PLEASE TICK THE APPROPRIATE CHECKBOXES}

**Required**

- Letter of interest/proposal, explaining why the applicant considers him- or herself the most suitable for the work.
- Letter of interest/proposal, providing brief methodology on how the work will be conducted and/or approached.
- Personal CV, including information about past experience in similar projects / assignments and contact details for referees.
- Financial proposal
- Duly accomplished Letter of Confirmation of Interest and Availability using the template provided by UNDP

**8. FINANCIAL PROPOSAL**

- Lump sum contract**

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in installments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including professional consultancy fee, international travel, etc.).

**Travel costs**

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket for the most direct and economical route. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel.

**Living costs**

Per Diem will be paid during his/her mission period in DPRK to the international consultant at the prevailing rate for the duty station approved by the International Civil Service Commission / UN.

**9. EVALUATION CRITERIA**

- Educational background – 10 points max  
(10 pts – PhD degree; 5 pts – Master’s degree)
- Relevant professional experience – 25 points max  
(25 pts – above 12 years; 20 pts – 8-12 years);
- Language Skills – 5 points max (5pts - native English speaker)
- Knowledge and experience about DPRK – 10 points max. (10 pts - work or consultancy experience in DPRK; 5pts – experience in other Asia Pacific countries)
- Methodology – 20 points max (20 pts – fully understand the task, logical and reachable; 10 pts - get sense of the task, basically meet the requirement; 5 pts – rough and unclear)

Maximum available technical score - 70 points.

**EVALUATION METHOD:**

**Cumulative analysis**

Contract award shall be made to the incumbent whose offer has been evaluated and determined as:

- a) responsive/compliant/acceptable, and
- b) having received the cumulative highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

\* Technical Criteria weight: 70%

\* Financial Criteria weight: 30%

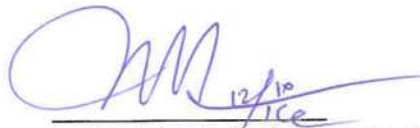
Only candidates obtaining a minimum 70% from the maximum available technical score (49 points) would be considered for the Financial Evaluation

The maximum number of points assigned to the financial proposal is allocated to the lowest price proposal and will equal to 30. All other price proposals will be evaluated and assigned points, as per below formula:

30 points [max points available for financial part] x [lowest of all evaluated offered prices among responsive offers] / [evaluated price].

The proposal obtaining the overall cumulatively highest score after adding the score of the technical proposal and the financial proposal will be considered as the most compliant offer and will be awarded a contract.

Approved by:



Stephen Kinloch Pichat, Deputy Resident Representative a. i., UNDP DPRK

**ANNEX**

Following documents will be shared with the international consultant after his / her recruitment contract is signed:

1. SERCARB project document
2. UN Strategic Framework DPRK 2011-2016
3. UN Strategic Framework DPRK 2017-2021
4. UNDP Country Programme Document DPRK 2011-2015
5. Concept note of the Rason Post-flood Rehabilitation
6. UNDP DPRK annual and quarter monitoring and evaluation reports
7. SERCARB annual and quarterly progress reports
8. SERCARB Project Steering Committee meeting minutes
9. Technical reports in the baseline survey by international and national consultants
10. Field monitoring and visit reports
11. UNDP Project Document template
12. Other documents and materials developed by the project

## Annex 2 Proposed evaluation approach

### 1. Preparation phase

**First** a remote **Introduction Meeting** will be held **with the relevant stakeholders within UNDP** to get a first impression of the project and the expectations of the stakeholders. This meeting will also be used to define and fine-tune the final Scope of Work and the expected content of the Debriefing Note as well as the Final Report. It is hereby suggested to use these definitions to benchmark the performance of the International Consultant.

In a **second step** the **relevant documentation provided by UNDP** will be revised in order to define the **final work plan and methodology**. As per the date of this offer and the ToR of the assignment the following documents will be shared with the International Consultant and serve as a basis to develop the final work plan and methodology:

1. *SERCARB Project Document;*
2. *UN Strategic Framework DPRK 2011 – 2016;*
3. *UN Strategic Framework DPRK 2017 – 2021;*
4. *UNDP Country Programme Document DPRK 2011 – 2015;*
5. *Concept note of the Rason Post-flood Rehabilitation;*
6. *UNDP DPRK annual and quarter monitoring and evaluation reports;*
7. *SERCARB annual and quarterly progress reports;*
8. *SERCARB Project Steering Committee meeting minutes;*
9. *Technical reports in the baseline survey by international and national consultants;*
10. *Field monitoring and visit reports;*
11. *UNDP Project Document template;*
12. *Other documents and materials developed by the project;*
13. ...

It is well understood that this list is not exhaustive and will be completed with other relevant documents necessary for the fulfillment of the assignment.

In parallel with the above described desktop study it is planned in a **third step** to develop and fine tune the **work plan and methodology** for the in-country mission. In chapter 2 of this offer a tentative work plan is proposed which is suggested to serve as basis for the final work plan. It shall be noted that this work plan is tentative and not final at present state.

In order to develop a work plan and a methodology that satisfies the expected outcomes of UNDP DPRK it is hereby suggested to have remote update and progress meetings with the relevant UNDP staff during the this preparation phase at least every two days. Main focus shall be laid on the feedback on the works performed so far and the incorporation of changes and suggestions that may be made by the people working on ground and in the field for the SERCARB project. It is planned that each one of these meetings shall not take longer than 1 hour and will last typically between 10 minutes and half an hour.

The **deliverables** for this phase of the consultancy are:

- **Draft assignment work plan and methodology**, which will be finished and handed in for comments and suggestions 1 week after contract signature;
- **Final assignment work plan and methodology**, revised and approved by UNDP 2 weeks after contract signature.

### 2. Field Mission in DPRK

The second part of the assignment is the field mission, which is expected to last 10 days in DPRK. The purpose of this field mission is to collect further information related to the project and to prove and/or correct the information given in the documents made available during the preparation. Main purpose of the mission to DPRK is to:

- **Analyze** the progress achieved, benchmarked by the monitoring and evaluation indicators developed in the Project Document previously analyzed;

- **Develop** in collaboration with the relevant stakeholders a proposal, including narrative description and results and resource framework for the extension. This document will be elaborated using the UNDP project documents template.

For this purpose the following tools are suggested in the ToR:

1. **Interviews** with relevant stakeholders that can give insights into the project and the course of the project. The list of relevant stakeholders will be defined during the preparation phase and proper appointments will be made prior to the arrival of the International Consultant.

It is hereby suggested to develop different guiding questionnaires for the interviews. From previous experience it is advised to use different interview techniques such as qualitative interviews, narrative interviews as well as focus group discussions in order to access the relevant information with different tools available for the evaluation of projects.

2. **Field visits** to the project counties and the communities. Main purpose here is to get an on site impression of the impact and benefits of the project as well as to identify possible problems and drawbacks in the implementation of the project.

Tools for the collection this type of data will be interviews, guided visits through the project counties and communities as well as possibly focus group interviews. Likewise photo documentation will be used to assess the progress in graphical form.

At the end of the mission, still in DPRK, the major findings and recommendations will be presented to the relevant UNDP stakeholders and national counterparts as well as any staff assigned by UNDP. The mission will finish with a Debriefing Note and a presentation that will serve as basis for the final report and will therefore be agreed with relevant UNDP staff and national stakeholders.

According to the Project Document and the information given in the ToR the project target area is located north and north-west of the DPRK capital Pyongyang as it can be seen on the map extracted from the Project document. Based on this information a tentative work plan is suggested.



Map 1 Project area (yellow)

From the available information it is understood that the project has implemented demonstrative pilots in the North Pyongan and South Pyongan Province. It is furthermore assumed that 2.5 days for field visits per province will be sufficient to perform the proposed tasks and collect the relevant data.

Based on this information and the experience gained during previous assignments in DPRK the following tentative time plan is suggested:

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Date	28/11	29/11	30/11	01/12	02/12	03/12	04/12
Morning		Introductory meeting with UNDP and national counterpart stakeholders	Travel to South Pyongan Province Project Site(s)	Field visits in South Pyongan Province with interviews of national counter-	Field visits in South Pyongan Province with interviews of national counter-	Internal work and preparation of Debriefing Note and Findings	Internal work and preparation of Debriefing Note and Findings

				parts, local partners and community beneficiaries	parts, local partners and community beneficiaries		
<b>Evening</b>	International travel and arrival to Pyongyang with flight CA121 at 16:20 from Peking	Revision of work plan and discussion of findings so far with UNDP stakeholders and national counterpart	First meeting with local partners and community beneficiaries	Field visits in South Pyongan Province with interviews of national counterparts, local partners and community beneficiaries	Travel to Kaechon City	Internal work and preparation of Debriefing Note and Findings	Internal work and preparation of Debriefing Note and Findings

Table 8 Suggested schedule for week 1 of in-country mission

<b>Day</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>Date</b>	<b>05/12</b>	<b>06/12</b>	<b>07/12</b>	<b>08/12</b>	<b>09/12</b>
<b>Morning</b>	Travel to North Pyongan Province Project Site(s)	Field visits in North Pyongan Province with interviews of national counterparts, local partners and community beneficiaries	Field visits in North Pyongan Province with interviews of national counterparts, local partners and community beneficiaries	Preparation of Debriefing Note and Findings	Sightseeing in Pyongyang
<b>Evening</b>	First meeting with local partners and community beneficiaries	Field visits in North Pyongan Province with interviews of national counterparts, local partners and community beneficiaries	Travel to Pyongyang, UNDP office	Presentation of Debriefing Note and Findings to UNDP stakeholders and National Counterparts	Departure from FNJ to PEK at 17:20 with flight CA122

Table 9 Suggested schedule for week 2 of in-country mission

The above schedule is subject to changes and shall incorporate any suggestions and recommendations made by UNDP staff and/or national counterparts, but serves as a first discussion basis.

The **deliverable** for this phase of the consultancy is a report and a presentation that collects the findings and recommendations from field assessment work. This report will be handed in right after the end of the mission.

### 3. Report writing and Consultancy finishing

Arriving back to the home office the International Consultant prepares the Final Assignment Report, which includes at least the following chapters:

1. **Introduction**
  - 1.1. *General Country Context*
  - 1.2. *Project Introduction*
  - 1.3. *Scope of Work*
2. **Project Evaluation**
  - 2.1. *Description of Baseline as defined in prior to the start of the project*
  - 2.2. *Present state of Project (Status Quo)*
  - 2.3. *Project Achievements in comparison to baseline*
3. **Project Outlook**
4. **Lessons learnt**
5. **Proposal for Project Extension**

For a fluent, proactive and satisfactory finishing of the consultancy it is planned to hold at least weekly progress meetings with the relevant UNDP stakeholders to get fast feedback on the final report.

The **deliverables** for this phase of the consultancy are:

- **Draft assignment report**, which will be finished and handed in for comments and suggestions 2 weeks after the end of the in-country mission;
- **Final assignment report**, which will be finished and handed in for certification by UNDP 4 weeks after the end of the in-country mission;



#### 4. Deliverables and overall time plan

Summarizing the following deliverables will be handed in during the consultancy:

- **Draft assignment work plan and methodology** (contract signature + 1 week);
- **Final assignment work plan and methodology** (contract signature + 2 weeks);
- **Findings and recommendations from field assessment work** (end of in-country mission);
- **Draft assignment report** (end of in-country mission + 2 weeks);
- **Final assignment report** (end of in-country mission + 4 weeks);

With the above the overall tentative time plan looks like this:

	Week 0	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	07/11 - 13/11	14/11 - 20/11	21/11 - 27/11	28/11 - 04/12	05/12 - 11/12	12/12 - 18/12	19/12 - 25/12	26/12 - 01/01	02/01 - 08/01
<b>Task</b>	Mission Preparation		In-Country Mission			Final reporting			
<b>Milestones</b>	Contract Signature	Draft assignment work plan and methodology	Final assignment work plan and methodology		Findings and recommendations from field assessment work		Draft assignment report		Final assignment report

**Table 10 Consultancy implementation plan**

It is worth noting here that the final report preparation falls into Christmas Vacation period during which it might not be possible to get feedback from UNDP staff in time. Thus it is recommended to postpone the delivery date for the Final report by one week until second week of January 2017.

### Annex 3 Evaluative matrix

The present evaluative matrix is based on the evaluation matrix proposed for a full MTR. The matrix has been adapted accordingly to perform a fair and transparent review of the SERCARB project.

#### Indicator Assessment Key

Green= Achieved	Yellow= On target to be achieved (if no-cost extension granted to the project)	Red= Not on target to be achieved (even if no-cost extension is granted to the project)
-----------------	---	--

**Project goal: Minimize the negative impacts of climate change and environmental degradation on the livelihood of local community and improve community capacity and awareness for environment protection, sustainable management and utilization of natural resources as well as disaster risk management and climate change adaptation**

Project Strategy	Indicator	2013 Baseline Level	End of 2015 Level of APPR	2016 End-of-project Target	2016 Midterm Level & Assessment	Achievement Rating	Justification for Rating	Recommendations
<b>Output 1:</b> Community capacities for participatory hazard mapping and disaster reduction strengthened.	Number of community (county or ri-level) hazard maps and disaster reduction plans completed with UNDP support.	None	5	5	5	HS	The Project Document stated to start the project in two Ri's and expand from there to other communities. This goal has been achieved.	Very good exercise, which combines modern techniques of watershed management with indigenous knowledge, improving thus the ownership of the project activities.  <b>Thus it is highly recommended to maintain the methodology and implementation scheme used for this activity.</b>

Project Strategy	Indicator	2013 Baseline Level	End of 2015 Level of APPR	2016 End-of-project Target	2016 Midterm Level & Assessment	Achievement Rating	Justification for Rating	Recommendations
<b>Output 2:</b> Weather monitoring and early warning systems (EWS) improved in pilot watersheds.	Quantity and timeliness of local weather information provided to ri- and county-level Peoples' Committees in target sites.	Locally specific weather data is not routinely available. No county-level early warning system available.	None	2 flooding forecast and EWSs set up at least in 2 counties providing quality and timely weather forecast and early warning services.	EWS implementation at a premature stage.  Several trainings on EWS and forecasting conducted, but EWS not implemented yet	S	Preparatory works for the installation of the EWS have been undertaken.  Design works are finished, but procurement has been stucked due to external reasons.	Procurement has been the main obstacle for this activity. The solution of these issues is outside of projects range of influence.  <b>The time until the procurement is finalized shall be used to build the EWS component, which is community based.</b>
<b>Output 3:</b> Improved forest management to reduce flood risk, landslides and erosion in pilot watersheds.	Percentage of watershed area in pilot sites with evidence of deforestation, degradation and slope instability.	Estimate 35-45%, to be confirmed during detailed site assessment in year 1.	Not planned	20% estimated reduction of deforestation, degradation or slope instability with 5000ha of forest and sloping land reforested or rehabilitated	66ha (by project) and 245ha (by Community) planted in risky area to ensure 7,415ha of degraded forest rehabilitated/stabilized.	HS	Target met, considering the 7,415ha of degraded forest rehabilitated/stabilized	Sustainability of this component shall be assessed as budget intensive component.  <b>Indicator shall be revised and better defined for the Extension.</b>
<b>Output 4:</b> Sustainable utilization and rehabilitation of sloping lands in agricultural landscapes.	Area of agricultural land brought under sustainable management as a result of project activities	None	0 (not planned)	Area of agricultural land brought under sustainable management increased by 20% as a result of project activity	Civil works such as watercourse clearing, embankment, and gully check dam ensured 2,970ha of sloping/agricultural land rehabilitated/stabilized.	HS	Indicator difficult to handle as the total area of sloping land and total not available. The 2,970ha represent 12% of the overall watershed area, which includes forests, which are not used for agriculture, indicating that the 20% target is met.	Embankment activities shall be revised for its effectiveness and sustainability by Q1/2018.  <b>The Indicator shall be revised and adapted.</b>

Project Strategy	Indicator	2013 Baseline Level	End of 2015 Level of APPR	2016 End-of-project Target	2016 Midterm Level & Assessment	Achievement Rating	Justification for Rating	Recommendations
	Number of beneficiary households with access to sustainable energy sources and livelihood opportunities in project sites.	None	0 (not planned)	500 households improved access to livelihood and energy	Total beneficiary households in two Pilot Ri's: 500 (200 in Alili-Ri, 300 in Joyang-Ri)		Project achieved the target set in the Project Formulation Phase, showing the adequacy of the selected method and approach	Awareness Center and the attached activates helped to achieve this output.  <b>Highly recommended to proceed with this good practice.</b>
<b>Output 5:</b> Multistakeholder coordination and project management.	Timeliness of project implementation and delivery. Capacities of responsible parties and local project partners.	Average delivery rate in 2015 is 82%	Not assessed	Complete project management structure in place.  Project completed with all key substantive results delivered (over 95 %)	Project implementation target missed, but capability of PM team and project partner involvement makes the prognosis for end of project very positive.	S	Benchmarked against the original timeframe of 3.5 years the stage of implementation is overall good, with most of the project activities implemented or on the way of implementation	Some of the reports do not have date of production and/or author, making it difficult to assess the timeliness.

Table 11 Evaluative matrix

## Annex 4 Map of Project Region



Map 2 Site Visit Map, Background Map: Bing Maps ©

## Annex 5 In-Country mission itinerary

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
<i>Day</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	<i>25</i>	<i>26</i>	<i>27</i>
<i>Month</i>	<i>November</i>	<i>November</i>	<i>November</i>	<i>November</i>	<i>November</i>	<i>November</i>	<i>November</i>
<i>Task</i>	Reception of relevant project documents  Start of revision of documents	First feedback on findings and start of drafting work plan	Documents revision and development of work plan and methodology of work plan	Documents revision and development of work plan and methodology of work plan	Presentation of draft work plan and methodology Fine-tuning of work plan	-	
<i>Milestone</i>					<b>Draft work plan and methodology</b>		

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
<i>Day</i>	<i>28</i>	<i>29</i>	<i>30</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Month</i>	<i>November</i>	<i>November</i>	<i>November</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>
<i>Morning</i>	International flight MAD - PEK	Visa at Airport Arrival in Beijing; Visa pick-up in Beijing, Departure to Pyongyang (Air Koryo)	Introductory meeting with UNDP PM team	Travel to South Pyongan Province Project Site(s) in Kaechon City  Meeting with local partners and community beneficiaries (Joyang-ri and Alil-ri)	Travel to South Pyongan Province Project Site(s) in Kaechon City  Meeting with local partners and community beneficiaries (Joyang-ri and Alil-ri)	Internal work and preparation of Debriefing Note and Findings	
<i>Afternoon</i>		Arrival to Pyongyang	Meeting with Stakeholders, project counterparts (MoLEP and SHMA)	Meeting with local partners and community beneficiaries (Joyang-ri and Alil-ri),  Travel back to Pyongyang	Meeting with local partners and community beneficiaries (Joyang-ri and Alil-ri),  Travel back to Pyongyang		
<i>Milestone</i>		<b>Final work plan approved</b>					

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
<i>Day</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
<i>Month</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>
<i>Morning</i>	Travel to North Pyongan Province Project Site(s) in Pakchon County	Joint workshop with UNDP, NCC and Stakeholders (MoLEP and SHMA)	Debriefing Note preparation	Departure from FNJ to PEK with Air Koryo	Reporting		
<i>Afternoon</i>	Field Visit in North Pyongan Province (hydro monitoring station and the communities in Pakchon County)  Travel back to Pyongyang	Working Meeting with Stakeholders, project counterparts (MoLEP and SHMA)	Presentation of Debriefing Note and Findings to UNDP stakeholders and National Counterparts	International flight PEK - MAD			
<i>Milestone</i>			<b>Debriefing note ready</b>				

Review of UNDP SERCARB Project – DPR Korea

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
<i>Day</i>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
<i>Month</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>
<i>Task</i>	Reporting					-	-
<i>Milestone</i>					<i>First draft of report ready</i>		

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
<i>Day</i>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<i>Month</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>	<i>December</i>
<i>Task</i>	-	Reporting			-	<i>Christmas</i>	<i>Public holiday</i>
<i>Milestone</i>		<i>Feedback from UNDP received</i>		<i>Final report issued</i>			

## Annex 6 Interview Guide used for data collection and answers given

### ***How and by whom the Awareness Center and the Embankments have been constructed?***

The Awareness Center in Joyang-dong has been constructed with UNDP budget and in-kind contribution. UNDP provided cement and other construction material, while workforce was provided by in-kind contribution.

### ***How are the SLUGs organized?***

Self-organized groups of sloping land users, mainly women. Each SLUG decides who can become a member

### ***What is the meeting interval of the SLUGs?***

Meeting interval is at least weekly. Meetings are normally used for training and planning of works. Since the Awareness Center was built this is the main meeting point and used for the meetings. Meeting interval since then is twice a week for 45 minutes up to 1 hour.

### ***What are typical activities of SLUG in the context of this project?***

Typical activities are trainings and dissemination activities as well as the maintenance of the Food Processing machines.

### ***How is the decision process of the SLUGs organized?***

By votes. SLUGs are self-organized.

### ***How big is the participation of the population in the SLUGs?***

Most of the families living on sloping land are members of SLUGs.

### ***Which parts of the project are good and shall be replicated?***

The project has been a good demonstration to the rural population and the county what can be done to reduce vulnerability to natural disasters;

The SLUG in Joyang-Ri has initiated pig farm as further activities;

For the FMB the establishment of training center has been the biggest achievement as it helps to operationalize the trainings and increase the awareness

Embankment showed local population that these actions can have a positive impact on their livelihood;

Distribution of Awareness and Knowledge by the Awareness Center;

Knowledge transferred to the activities in the field;

Local people show more interest in the project and its activities;

Originally some reservations regarding the project activities;

Local people became (again) owners of their environment and see the impact of their actions (embankment, reforestation, awareness center building,...);

### ***What shall be improved?***

Project started from bottom to top;

Top has not been in the focus during this implementation;

Reforestation activities need more seedlings;



***Does the food processing activities generate an additional income to the SLUGs?***

Yes. Reduced distance for food processing, thus also benefiting the rest of the community and not only the SLUGs.

***What is the frequency of usage of the Awareness Centers?***

Weekly, every second or third day at least. During holidays the AC is used by university students from the Faculty of Life Science for field studies and trainings.

***Who uses the Awareness Center and for what activities?***

Main users is the SLUG. Second user group is the FMB (who is the owner) and students from Pyongyang, that visit to do field studies and trainings.

***What are the actions to be taken if something fails or need repair?***

FMB is responsible for the AC building and does repair and maintenance. Food processing machines are maintained by SLUG and budget for maintenance and repair is generated by income generating activities.

***Which reforestation activities have been implemented so far?***

15ha in the two Pilot Ri's.

## Annex 7 List of persons interviewed and met during the field visits

### **Field Visit to Joyang-dong (01/12/2016, 7:20 – 17:30)**

Mr. Kim Jong O, Director of External Cooperation Department at Provincial Level;  
Mr. Ko Song Jin, Officer, Kaecheon PC;  
Mr. Hwang Byong Sik, Vice-Chairman, Kaecheon PC;  
Mr. Jo Chang Sik, Manager of FMB;  
Mrs. Jong Sun Nyo, Head of SLUG;  
Mr. Han Yong Gil, Head of Substation under FMB;

### **Field Visit to Alil-ri (02/12/2016, 7:50 – 18:00)**

Mr. Choe Jong Tae, Director of Foreign Cooperation  
Mr. Ko Song Jin, Officer, Kaecheon PC;  
Mr. Hwang Byong Sik, Vice-Chairman, Kaecheon PC;  
Mr. Jo Chang Sik, Manager of FMB;  
Mr. Kong Mun Gwan, Head of Substation in Alil-ri;

### **Field Visit to Pakchon Weather Hydro-Meteorological Observation Station and Maengjung-ri Cooperative Farm (05/12/2016, 7:50 – 18:00)**

Mr. Ri Dong Chol, Chief of the Weather Hydro-Meteorological Observation Station;  
Mr. Jon Won Il, Desk officer, Disaster Management Department, PC, Pakchon County.

## Annex 8 List of reviewed documents

Category	Document (filename and type)
SERCARB Project Document	SERCARB signed ProDoc.pdf
UN Strategic Framework DPRK 2011 – 2016	2015 DPRK SF Review & Situation analysis - draft 26 Sept 2015.pdf DPRK UNSF 2011-2015_print_version.pdf
UN Strategic Framework DPRK 2017 – 2021	DPRK UN Strategic Framework 2017-2021 - signed.pdf
UNDP Country Programme Document DPRK 2011 – 2015	Letter to DPRK Ambassador on CPD 25Oct2016.pdf UNDP_KP_CPD.pdf
Concept note of the Rason Post-flood Rehabilitation	Concept Note for Rason rehabilitation work_revised final.docx
UNDP DPRK annual and quarter monitoring and evaluation reports	DPRK_2015_ProgrammeMonitoringReport_01feb2016_Final.docx DPRK_2015_Q1_MonitoringReport_11May2015_Revised_2205_clean.docx DPRK_2015_Q2_MonitoringReport_4Aug2015_Final.docx DPRK_2015_Q3_MonitoringReport_15Oct2015_Final.docx DPRK_2016_Q1_2016_MonitoringReport_29April2016.docx DPRK_2016_Q2_MonitoringReport_ver2Aug2016.docx
SERCARB annual and quarterly progress reports	ARR-SERCARB-2015.pdf
SERCARB Project Steering Committee meeting minutes	1st 00087040_SERCARB_PSC_No1_04032015_rev.doc 2nd 00087040_SERCARB_PSC_No2_Minutes_17062015_rev.doc 3rd 00087040_SERCARB_PSC_No3_Minutes_12102015 Yu Hua rev.doc 4th PSC meeting minutes Signed.pdf 5th PSC Meeting Minutes Final.pdf 6th SERCARB PSC meeting minutes_signed.pdf
Technical reports in the baseline survey by international and national consultants	Annex B Collected_Secondary_Data_final.docx DELIVERABLE 3_final report.docx DPRK SERCARB Field_Survey_Synthesis_Report_final.docx UNDP_Watershed_final-May 11_2016.docx
Field Visit Reports	00087040 SERCARB FieldMonitoring Rep.pdf 00087040 SERCARB FieldMonitoringReport_No 5_14Oct2015.pdf 00087040 SERCARB FieldMonitoringReport_No 7_19Nov2015.pdf 00087040 SERCARB FieldMonitoringReport_No1_9Mar15.pdf 00087040 SERCARB FieldMonitoringReport_No1_10to16Mar2016.pdf 00087040 SERCARB FieldMonitoringReport_No2_24Mar2016.pdf 00087040 SERCARB FieldMonitoringReport_No3_9Jun2016.pdf 00087040 SERCARB FieldMonitoringReport_No3_23July2015.pdf 00087040 SERCARB FieldMonitoringReport_No4_6Oct2015.pdf 00087040 SERCARB FieldMonitoringReport_No4_16Jun2016.pdf 00087040 SERCARB FieldMonitoringReport_No5_19July2016.pdf 00087040 SERCARB FieldMonitoringReport_No6_16-21Oct 2015.pdf 00087040 SERCARB FieldMonitoringReport_No6_25July2016.pdf 00087040 SERCARB FieldMonitoringReport_No7_19Oct2016.pdf 00087040 SERCARB FieldMonitoringReport_No8_20Nov2015.pdf 00087040 SERCARB FieldMonitoringReport_No8_20Oct2016.pdf 00087040_SERCARB_FieldMonitoringReport(Kachon)_No2_19052015.pdf 00087040 SERCARB FieldVisitReport_No10_01Feb2016 signed.pdf 00087040 SERCARB FieldVisitReport_No11_07Mar2016 final.pdf 00087040 SERCARB FieldVisitReport_No12_18Apr2016.pdf 00087040 SERCARB FieldVisitReport_No13_03May2016 final.pdf 00087040 SERCARB FieldVisitReport_No14_06July2016 final.pdf 00087040 SERCARB Mun_LearningRep_FM_No_22Sep2015.pdf Acceptance of Civil Works of Rason post flood rehabilitation.pdf handover of works and materials of Rason post flood rehabilitation.pdf SERCARB_Report 01Feb2016_Kaechon, Taechon.pdf SERCARB_Report 07Mar2016 Kaechon, Taechon.pdf

<b>Category</b>	<b>Document (filename and type)</b>
	SERCARB_Report 18 Aug2015_KAECHON.pdf
	SERCARB_Report 24Aug2015_KAECHON.pdf
	SERCARB_Report 27Aug 2015_KAECHON.pdf
	SERCARB_Report_24Mar2016_Kaechon, Taechon.pdf
Study Tour Reports	Report on the international study tour 5-14 Dec 2015.doc
	Report of Study tour-EWS 2016.docx
	Watershed Management Study Tour Report - 2016.doc
Training_Documentation	In country training report.doc
	Report on in-country training.doc

## Annex 9 Additional information on achievements of Output 3 and 4

Community	Total Watershed Area	Agricultural Area	Forest Area	Degraded Area	Risky Area	Achievement
Joyang-ri	3,980	320	3,771	1,622	80	<ul style="list-style-type: none"> <li>15ha (by project) and 50ha (by Ri) planted in risky area to ensure 1,320ha of degraded forest rehabilitated/stabilized.</li> <li>Embankment and gully check dams in upper part in Namchon River ensured 480ha of sloping/agricultural land rehabilitated/stabilized.</li> </ul>
Alil-ri	3,370	570	2,750	1,128	70	<ul style="list-style-type: none"> <li>13ha (by project) and 50ha (by Ri) planted in risky area to ensure 1,015ha of degraded forest rehabilitated/stabilized.</li> <li>Embankment and gully check dams in tributary in Namchon River ensured 370ha of sloping/agricultural land rehabilitated/stabilized.</li> </ul>
Songtae-ri	1,122	490	531	238	60	<ul style="list-style-type: none"> <li>8ha (by project) and 45ha (by Ri) planted in risky area to ensure 470ha of degraded forest rehabilitated/stabilized.</li> <li>Watercourse clearing and gully check dams in Chonbang stream, branch of Taeryong River ensured 620ha of sloping/agricultural land rehabilitated/stabilized.</li> </ul>
Rason Area	16,500	1,250	13,300	5,320	150	<ul style="list-style-type: none"> <li>30ha (by project) and 100ha (by Community) planted in risky area to ensure 4,610ha of degraded forest rehabilitated/stabilized.</li> <li>Watercourse clearing and embankment in Pakhak stream ensured 1,500ha of sloping/agricultural land rehabilitated/stabilized.</li> </ul>
<b>Total</b>	<b>24,972</b>	<b>2,630</b>	<b>20,352</b>	<b>8,308</b>	<b>360</b>	<ul style="list-style-type: none"> <li>66ha (by project) and 245ha (by Community) planted in risky area to ensure 7,415ha of degraded forest rehabilitated/stabilized.</li> <li>Civil works such as watercourse clearing, embankment, and gully check dam ensured 2,970ha of sloping/agricultural land rehabilitated/stabilized.</li> </ul>

Information provided by PM, based on MoLEP data

## Annex 10 Review Ratings

The review rating used here is based on the rating recommended to use for a regular MTR as presented in [1].

Ratings for Progress Towards Results: (one rating for each outcome and for the objective)		
6	Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as “good practice”.
5	Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
4	Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
3	Moderately Unsatisfactory (HU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
2	Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
1	Highly Unsatisfactory (HU)	The objective/outcome has failed to achieve its midterm targets, and is not expected to achieve any of its end-of-project targets.

Ratings for Project Implementation & Adaptive Management: (one overall rating)		
6	Highly Satisfactory (HS)	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as “good practice”.
5	Satisfactory (S)	Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
4	Moderately Satisfactory (MS)	Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management.

Ratings for Sustainability: (one overall rating)		
4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved by the project’s closure and expected to continue into the foreseeable future
3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review
2	Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained

## Annex 11 UNEG Code of Conduct for Evaluation in the UN System

### Evaluation Consultants Agreement Form

To be signed by all consultants as individuals (not by or on behalf of a consultancy company) before a contract can be issued.

### Agreement to abide by the Code of Conduct for Evaluation in the UN System

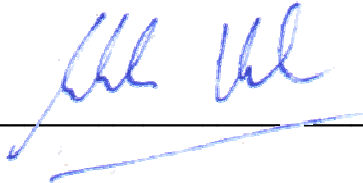
**Name of Consultant:** Mathias Hölzer

**Name of Consultancy Organization** (where relevant): —

**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.**

Signed at Madrid (Spain) on 21/11/2016

Signature: \_\_\_\_\_

A handwritten signature in blue ink, appearing to be 'MH', is written over a horizontal line. The signature is stylized and cursive.