

**United Nations Development Programme**

조선민주주의인민공화국주재  
유엔개발계획대표부



*Empowered lives.  
Resilient nations.*

---

Terminal Evaluation of the “Strengthening the Resilience of Communities  
through Community-Based Disaster Risk Management” Project  
(CBDRM Project)

[Award ID: 00091747, Project ID: 00096791]

# **TERMINAL EVALUATION REPORT**

---

**Prepared By:**

Dr. Jeff Fang  
International Consultant

**January 2020**

---

## **EXECUTIVE SUMMARY**

This report is the result of the terminal evaluation mission which took place from November to December 2019, including the field mission in DPRK from 22 November to 2 December 2019. It was conducted in accordance with the principles outlined in the UNEG “Ethical Guidelines for Evaluations”.

### **1. Project Summary Table**

<b>Project Title</b>	“Strengthening the Resilience of Communities through Community-Based Disaster Risk Management” Project (CBDRM Project)		
ATLAS Business Unit, Award #, Project ID	Business Unit: UNDP DPRK Award ID: 00091747, Project ID: 00096791		
Country:	DPRK	Date project manager hired:	March 2016
Region:	Northeast Asia	Planned closing date:	31-12-2019
Project Document (ProDoc) Signature Date:	08-10-2015	If revised, proposed closing date:	
Executing Agency/ Implementing Partner:	UNDP DPRK CO		
Other project partners:	<ul style="list-style-type: none"> <li>• Central Bureau of Statistics (CBS)</li> <li>• State Committee for Emergency and Disaster Management (SCEDM)</li> <li>• Ministry of Land and Environment Protection (MOLEP)</li> <li>• State Hydro-Meteorological Administration (SHMA)</li> <li>• Local counterparts at the county level: Yonsan and Singye Counties (North Hwanghae Province), Yangdok County (South Pyongan Province)</li> </ul>		

<b>Project Financing</b>	<i>at Senior Management/Executive Board Level endorsement (US\$)</i>	<i>Actual at Terminal Evaluation (US\$)</i>
[1] UNDP contribution:	US\$2,204,200 (approved PRODOC budget) with an increased project funding to US\$4,363,416.36 <sup>1</sup>	US\$3,401,031.60
[2] Government:	In-kind contributions	In-kind contributions
[3] Other partners:		
<b>Project Total Costs</b>	US\$4,363,416.36	US\$3,401,031.60 (As of 22 November 2019)

## 2. Project Description in Brief

The occurrences of extreme weather events and seasonal variability are one of the key contributors to loss in livelihoods, increase in poverty and significant threat to human development in rural areas in DPRK.

The causes of flood, landslides and droughts in the country are not limited to weather and climate conditions. In most of the rural areas, forest ecosystems have been converted into agricultural land in order to overcome food shortages and trees have been cut down as the primary source of household level energy.

The destruction of DPRK's forests contributed significantly to serious damage when impacted by natural hazards, especially, flooding, and landslides since deforestation weakens nature's buffering ability to store water. Currently, there is a large gap in capacities at all levels to cope with the impact of disasters and to improve communities' responsiveness and resilience.

The UNDP noted recent improvements in disaster preparedness and increased attention at national level to address the underlying factors that contribute to risks, against the backdrop of development priorities that focus on environmental protection and water conservation. The CBDRM Project will help local level communities acquire knowledge of successful practices in Community-based Disaster Risk Management (CBDRM) processes, timely and appropriate risk information and access to early warning, develop coping skills as well as access resources and services for disaster risk reduction actions.

The CBDRM Project was formulated in October 2015 with the following objective:

***To enhance vulnerable communities' resilience to natural hazards***

---

<sup>1</sup> The CBDRM Project has a duration of slightly over 4 years (October 2015 to December 2019) at an approved budget of US\$2,204,200. In November 2016 when UNDP focused on ad hoc intervention in flood affected areas in North Hamgyong Province, US\$1.6 million was added to the CBDRM project (through TRAC 1,2,3) to expedite emergency response. The project further received unspent funds from "Strengthening Ecosystem Resilience and Community Adaptive Capacity in Climate Affected River Basins in DPRK" (SERCARB) project and transferred some portion of management budget of the SED project towards the end of 2018, thus the project total budget became US\$ 4,363,416.36

In order to achieve the above project objective, two outputs are expected from the CBDRM Project:

- Output 1: Ri level rural communities are provided with skills and resources enabling them to implement community-based disaster risk management measures.
- Output 2: Mechanisms, Guidelines and Procedures for promoting CBDRM are developed and implemented at local (Ri) level. Further, the project will strengthen selected communities' capacities for participatory hazard mapping and disaster reduction.

The CBDRM Project is aligned with the CPD Outcomes and is based on the UNDP Strategic Plan 2014-2017. The CBDRM Project will directly contribute to 3 Corporate Outcomes:

- Outcome 1 - Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded
- Outcome 5 - Countries are able to lower the risk of natural disasters, including from climate change
- Outcome 6 - Early recovery and rapid return to sustainable development pathways are achieved in post-disaster settings.

Adopting DIM, the CBDRM Project's Implementing Agency is UNDP with a dedicated project management team based in the UNDP DPRK CO. An International Project Manager is responsible for the daily management of the project with assistance from national project staff and recruited consultants. The CBDRM Project also had the following project partners:

- National counterparts - NCC for UNDP, line ministries, State Institutions at the central level
- Local counterparts – CPCs and other key stakeholders of Yonsan and Singye Counties (North Hwanghae Province) and Yangdok County (South Pyongan Province)

The CBDRM Project has devised criteria for the selection of its sites in early 2016. Given the common parameters in terms of vulnerability, repeated exposure to disasters, and insufficient resources to respond, selected seven project sites in common with another ongoing "Sustainable Energy Solutions for Rural Livelihoods in DPRK" Project (SES Project) in the portfolio, given the inter-connections between energy access and disaster management, through integrated responses to leverage synergies of both projects for a magnified development result.

### 3. Evaluation Rating Table

Overall Results/Impact:		Achievement Rating <sup>a</sup>
<u>Outcome</u> Resilience to natural hazards of vulnerable communities are enhanced		
<u>Output 1</u> Ri level rural communities are provided with skills and resources enabling them to implement community-based disaster risk management measures.	<u>Output 1.1</u> Communities in high risk areas with access to severe weather warning information, with involvement in local and indigenous early warning system and in community preparedness measures to undertake emergency response and early recovery.	<b>S</b>
	<u>Output 1.2</u> Communities in high risk areas have skills in hazard and vulnerability assessment, and involved in planning and implementing risk resilient agro forestry and rural livelihood. <ul style="list-style-type: none"> <li>• Non-structural interventions</li> <li>• Structural interventions</li> </ul>	<b>S</b> <b>U</b>
<u>Output 2</u> Mechanisms, Guidelines and Procedures for promoting CBDRM are developed and implemented at local (Ri) levels	<u>Output 2.1</u> Stakeholders CBDRM Programme Framework is developed and agreed with elements of strategy, priorities, targeting, roles and responsibilities, resource allocation and resources and partnership including possible joint activities in training and project implementation. <ul style="list-style-type: none"> <li>• With National Counterparts</li> <li>• With International Agencies/Organizations</li> </ul>	<b>HS</b> <b>MU</b>
	<u>Output 2.2</u> Comprehensive guidelines on CBDRM including training methodologies, materials, knowledge product.	<b>S</b>
	<u>Output 2.3<sup>b</sup></u> 2,666 housing units covered with semi-permanent shelter solutions (as emergency response to flooding in North Hamgyong province in October-November 2016)	<b>U/A</b> (The Evaluator did not visit the project site to verify and confirm the actual results)

Note:

a. Evaluation Rating:

6. Highly Satisfactory (HS): no shortcomings
5. Satisfactory (S): minor shortcomings
4. Moderately Satisfactory (MS): moderate shortcomings
3. Moderately Unsatisfactory (MU): significant shortcomings
2. Unsatisfactory (U): major shortcomings
1. Highly Unsatisfactory (HU): severe shortcomings
- N/A Not Applicable
- U/A Unable to Assess

b. Although not originally planned, an additional Output 2.3 was added in late 2016 with the approval of the Project Steering Committee (PSC) to channel emergency support for communities affected by flooding in the North Hamgyong Province.

<b>Evaluation Ratings:</b>			
<b>Category</b>	<b>Rating<sup>c</sup></b>	<b>Category</b>	<b>Rating<sup>c</sup></b>
Relevance	<b>S</b>	Basic Human Needs/Gender Equality	<b>S</b>
Effectiveness		Synergy	<b>MS</b>
<ul style="list-style-type: none"> <li>• Non-Structural Interventions</li> <li>• Structural Interventions</li> </ul>	<b>S</b> <b>U</b>		
Efficiency	<b>MS</b>	National Ownership	<b>S</b>

Note:

c. Evaluation Rating:

6. Highly Satisfactory (HS): no shortcomings
5. Satisfactory (S): minor shortcomings
4. Moderately Satisfactory (MS): moderate shortcomings
3. Moderately Unsatisfactory (MU): significant shortcomings
2. Unsatisfactory (U): major shortcomings
1. Highly Unsatisfactory (HU): severe shortcomings

<b>Sustainability Ratings</b>	
<b>Category</b>	<b>Rating<sup>d</sup></b>
Sustainability	<b>ML</b>

Note:

d. Sustainability Rating:

4. Likely (L): negligible risks to sustainability
3. Moderately Likely (ML): moderate risks
2. Moderately Unlikely (MU): significant risks
1. Unlikely (U): severe risks

#### **4. Summary of Conclusions and Lessons Learned**

##### **Conclusion #1: Significant External Factors/Challenges Severely Affected the Project**

Significant external factors/challenges beyond the control of the UNDP DPRK CO were encountered throughout the entire CBDRM project implementation, and severely affected the timely delivery of structural interventions and eventual achievement of results for Output 1.2. The 6 rounds of UN Sanctions on DPRK (2016-2017) and the extended period of the banking channel disruptions/closure were identified as the main constraints.

The evaluation noted that the CBDRM PRODOC did not include appropriate risk assessments which identified potential risks with impact and probability ratings. However, the CBDRM Project Team subsequently incorporated risk assessments in the Quarterly Progress Reports and risk logs in the Annual Project Progress Report. The evaluation reviewed that the risk analysis should have been included in the CBDRM PRODOC so that the Project could have prepared corresponding counter-measures/management responses which were appropriate at that point of time and during the project implementation (2015 to 2019).

The evaluation also determined that the implementation of the CBDRM Project's counter-measures/management responses by the UNDP DPRK CO and CBDRM Project Team could not appropriately resolve the significant change of events caused by the UN Sanction measures and the extended banking channel disruption/closure over the project duration.

Lesson Learned:

- Delayed efforts to complete structural interventions severely disrupted county and village community Ri development plans/activities, resulting in potential economic loss and hardship to village communities (Ris).
- It is important to better manage village community (Ri) expectations to avoid/minimize potential economic loss and hardship to counties and village communities (Ris).
- Long-term scenario planning together with annual reviews for change of direction should form part of risk assessment and mitigations in special country context projects.

Conclusion #2: CBDRM model has potential for replication across DPRK but requires strong national ownership and commitment as the key to overcome any difficulties faced and achieve optimum results

An important result demonstrated in the CBDRM Project was how the intended project outputs addressed country priorities and also fit within the county development priorities with new strategies and initiatives being planned for sustainable living and livelihoods. This was further strengthened with strong support and commitment from National/Local Counterparts.

The high level of national and local ownership ensured sustainability and positive environmental impact, despite the CBDRM Project encountering external challenges that severely constrained the project beneficiaries.

The CBDRM model has the potential to be replicated across DPRK in close partnership collaboration with National and Local Counterparts. To ensure the continuity and also strengthening of national ownership, future replication projects should also be accompanied by appropriate capacity building activities in PRNA and DRMP at local county and village levels. However, this replication must be complemented with timely structural interventions as part of disaster prevention/mitigation measures to benefit the end-users at the county/village community (Ri) level.

Lesson Learned:

- Strong national ownership combined with strong commitment/support and participation from CPCs and Ri village communities key to accelerate the CBDRM model and bear lasting results.
- Knowledge/operational transfer in PRNA and DRMP, including the knowledge/operational capabilities and capacities of the CBDRM Project National Consultants/Experts, should be carried out to extend the pool of national and local resources.

Conclusion #3: The UNDP CBDRM Project Team has done their best but there is room for improvement

Despite the challenging circumstances, the CBDRM Project Team has done their best and laid strong foundations of PRNA and DRMP through the CBDRM Project outputs and activities. In addition, the completed tasks align closely with the DPRK NSDRR. The CBDRM Project Team was able to implement the project, especially the non-structural interventions, despite encountering the significant external factors/challenges which are beyond the control of the UNDP DPRK CO throughout the entire CBDRM Project by:

- displaying good project management abilities and effectively utilising appropriate project management tools to implement the CBDRM Project to the best of their abilities and resulted in:

- community risk maps and disaster risk management plans including annual review of these plans, preparedness for response and early recovery in 15 communities in 2017.
- annual review of Participatory Risk and Needs Assessment (PRNA) and Disaster Risk Management Planning (DRMP) in 15 village communities (Ris) in 2017, where reports including DRM plans were finalised and translated into Korean which were subsequently handed over to the Ris.
- PRNA and DRMP in 15 village communities (Ris) and also with Sloping Land User Groups (SLUGs) using a combination of DRM equipment, tools and techniques
- training for 10,162 people (including 4,611 female), based on project reports, on coping strategies against a target of 450 through evacuation simulation, PRNA and DRM plan trainings across the 15 selected Ris.
- procured resources and delivered supplies for community level preparedness measures for early warning and evacuation.
- national workshops on discussing lessons learned, progress, challenges and opportunities for improving CBDRM practice.
- promotion of south-south cooperation with other countries through organized study tours while implementing the CBDRM Project.
- training materials on CBDRM functions to represent comprehensive guidelines and methodologies on CBDRM.
- guidelines for local level EW Systems and evacuation measure, protection of critical community assets focusing on local rainfall and weather parameters.
- guidelines on local level preparedness and contingency planning process.
- guidelines and technical training on disaster damage, loss and needs assessment and reporting.

However, improvements could still be further strengthened in the following areas:

1. communication of project results, information sharing and lessons learned among international agencies and organizations through a suitable communications platform.
2. field data collection to measure effectiveness and impact on completed project activities.
3. for improved financial accountability and transparency purposes as part of demonstrating the efficient use of funding on project output-based activities, future financial reporting processes and templates of UNDP DPRK projects should:
  - track and report consistent financial figures (budget and actual expenditure).
  - have consistent comparisons between budget and actual expenditure, as per project outputs, based on project CDRs, for submissions of all relevant project reports (including annual progress reports and submissions to PSC meetings).

Lesson Learned:

- CBDRM is a multi-level and multi-sectoral effort. The communication of project results, sharing of information and lessons learned among international organizations/agencies would further strengthen and broaden efforts exponentially in emergency response, early warning, disaster management/planning and disaster prevention/mitigation measures.
- it is important to conduct an independent impact evaluation study as a future project output/activity component to measure impact effectiveness, final end-line indicators and actual benefits gained.



**Key Success Story: Increased Public Awareness, Knowledge and The Application Of Disaster Risk Management to Strengthen Village Community Resilience**

The CBDRM Project aims to enhance the resilience of vulnerable communities to different types of natural hazards. The CBDRM Project seeks to achieve this objective by imparting skills and guiding the appropriate use of resources necessary for managing risks over time at village community (Ri) level. These will enable village communities (Ris) to minimize and reduce annual loss of lives, recurring losses to livelihood assets and build capacities to manage and sustain achievements in coping with disasters and in adapting to changing climate conditions.

	<b>Prior to UNDP CBDRM Project Interventions</b>	<b>Post UNDP CBDRM Project Interventions</b>
Public awareness and knowledge of natural disaster types and DRM	<ul style="list-style-type: none"> <li>• Lack of knowledge in natural disaster types for different seasons such as typhoons, torrential rains, floods</li> <li>• Lack of understanding on causes of landslides and soil erosion on mountain slopes</li> <li>• No understanding or knowledge of village community's current vulnerable/danger areas, needs and resources</li> <li>• Lack of information on local village community (Ri) disaster records and histories</li> </ul>	<ul style="list-style-type: none"> <li>• Educational materials on natural disaster types and emergency preparations/responses distributed to village community (Ri) households to increase public awareness and knowledge on disaster types and DRM</li> <li>• SLUGs received training on risk resilient livelihood and ecosystem development.</li> <li>• agro-forestry activities through provision of seeds and saplings, and management of tree nursery transplantation of fast-growing trees prevented soil erosion and landslides on mountain slopes</li> <li>• village communities (Ris) developed DRM Plans which identified the major disasters, risks and disaster mitigation and emergency response plans</li> <li>• Established Disaster Loss and Damage data cards to collect important information for taking informed decisions and come up with interventions in DRM and DRR</li> <li>• Annual emergency response drills and simulation exercises (active participation by village community people) increased community alertness and preparedness for natural disasters</li> </ul>
Responding to natural disasters at village communities (Ris)	<ul style="list-style-type: none"> <li>• Difficult to disseminate information as telecommunications were cut off</li> <li>• community used traditional methods such as gong, bell, signal flag, light, etc. to inform about disaster</li> <li>• village communities were not fully prepared and evacuated in a disorganized and chaotic manner</li> <li>• village people's first reaction was panic and to just run to the nearest known higher ground areas which might result in overcrowding at one evacuation point</li> <li>• village communities were confused, and did not clearly understand what to do, how to respond and where to go during a natural disaster</li> </ul>	<ul style="list-style-type: none"> <li>• Development of PRNAs, DRMPs, hazard/risk maps and evacuation route maps</li> <li>• Formation of Village (Ri) Non-Standing Disaster Risk Management Committee to take charge of developing/ implementing DRM plans and measures in response to natural disasters at village communities</li> <li>• Selection and allocation of village community (Ri) evacuation centers/sites/points</li> <li>• During Typhoon Ling Ling in early September 2019: <ul style="list-style-type: none"> <li>➢ village communities (Ris) prepared and used the emergency response equipment such as life jackets, megaphones and emergency alarming bells for EW during the disaster in cooperation with the UNDP CBDRM Project</li> <li>➢ village community (Ri) people applied what they learnt during the emergency response drills/simulation exercises and knew how to go to their allocated evaluation centers/sites/points in an organized manner</li> </ul> </li> </ul>

## 5. Recommendations

The evaluation proposes 6 recommendations for consideration and implementation whereby:

- 3 operational recommendations relate to how the UNDP DPRK CO could further improve the way it operates as an organization. It is to be noted that the implementation of these recommendations would be dependent on the future of the UNDP DPRK CO structure operating in DPRK in view of the geo-political environment and the availability of an approved UNDP DPRK CPD.

### R1: Strengthen financial reporting processes

For improved financial accountability and transparency purposes, UNDP DPRK project financial reporting processes and templates should track and report progress of consistent financial figures i.e. budget and actual expenditure for consistent comparisons between budget and actual expenditure, as per project outputs, based on project CDRs, for submissions of all relevant project reports (including annual project progress reports), to demonstrate the efficient use of funding on project output-based activities.

### R2: Extensive review and update of UNDP DPRK CO policies and procedures

UNDP DPRK CO should ensure that suitable policies and procedures can be implemented to resolve future issues in the event of unforeseen circumstances and minimize reputational risks by:

- R2.1) working with UNDP Regional HQ to extensively review and update all operational, procurement and financial management policies and procedures to account for all that happened within the 2015-2019 period and appropriately mitigate any future constraints.
- R2.2) incorporating extensive long-term scenario planning processes with appropriate and specific risk assessments and counter-measures.
- R2.3) setting conditions and mechanisms to implement “Force Majeure” or early termination of projects if need to.
- R2.4) strengthening its relationship management processes with project beneficiaries such as continued field visits, as practical and as relevant as required during the project implementation period, to better manage stakeholder expectations. By doing so, this would avoid/minimize potential economic and productivity losses to counties/village communities (Ris).
- R2.5) minimizing and/or avoiding unequal distribution of delivered assets/items to avoid unhealthy comparisons between project beneficiaries and across any projects that have synergies.

### R3: Should UNDP DPRK be authorized to proceed, all remaining project activities (specifically relating to the CBDRM Project’s structural interventions) as part of disaster prevention/mitigation strengthening measures should be completed

To strengthen disaster mitigation/prevention measures at village community (Ri) level, UNDP DPRK CO, if authorized to proceed, should work closely with national and local DPRK counterparts to complete all remaining project activities:

- R3.1) complete all planned procurement of equipment/materials relating to structural interventions, while strictly adhering to relevant UNDP Policies and Procedures and UNDP DPRK Guidelines for Field Monitoring Visits to:
  - monitor and report on the use of the assets and delivered items, after handover to project beneficiaries, at minimum during project implementation.
  - ensure successful delivery onsite and the use of the delivered items for their intended purpose to achieve the desired project results, particularly paying attention to monitoring the delivery of the structural interventions to ensure their intended purpose after the CBDRM Project closure.

R3.2) conduct an independent impact evaluation study, as a future project output/activity component, to measure the impact effectiveness, final end-line indicators and actual benefits gained.

- 3 recommendations relate to future directions by building on the successful pilot projects in the CBDRM Project. By doing so, this will further replicate and upscale with a significant focus on humanitarian-oriented interventions to overcome climate change conditions in the DPRK. Similarly, it is to be noted that the implementation of these recommendations would be dependent on the future of the UNDP DPRK CO structure operating in DPRK in view of the geo-political environment and the availability of an approved UNDP DPRK CPD.

R4: Nation-wide rollout/replication of the CBDRM Project in DPRK at village community (Ri) level

It is strongly recommended that UNDP DPRK CO should fully adopt the CBDRM Project and continue to upscale from its successful pilot CBDRM model for future nation-wide rollout/replication in DPRK. This should be done by working in close partnership with relevant DPRK national counterparts (SCEDM, MOLEP, CBS and SHMA) and local DPRK counties to implement at village community (Ri) level:

- R4.1) facilitate knowledge/operational transfer of the CBDRM Project with procedural, operational and hands-on training manuals, guidelines, SOPs, DRM plans and other related DRM equipment/materials.
- R4.2) implement suitable, cost-effective and timely structural interventions to strengthen disaster mitigation/prevention measures for identified disaster high-risk areas.
- R4.3) fully establish a fit-for-purpose Early Warning System at local village community (Ri) level to better inform emergency response/preparedness.
- R4.4) organize study tours, in other countries of similar context and/or culture to DPRK, for increased exposure to acquiring knowledge/application of best practices in DRM/DRR/EW Systems.

R5: Incorporate future UNDP DPRK CBDRM activities to align with/support the implementation of the DPRK National Strategy for Disaster Risk Reduction (NSDRR)

It is strongly recommended that future UNDP DPRK CBDRM activities should align with/support the implementation of the DPRK NSDRR. This would include working closely with SCEDM in its leading role to:

- R5.1) strengthen and integrate infrastructure, systems and processes for disaster risk reduction, early warning and emergency response purposes at county level.
- R5.2) develop fully-automated measurements at local village community (Ri) level for accurate forecasting of climatic hazards.
- R5.3) improve watershed management to reduce/eliminate disaster risk factors such as floods, landslides and soil erosion.
- R5.4) establish a fully-integrated fit-for-purpose national disaster management system, incorporating a standardized nation-wide village community (Ri) reporting on disaster loss and damage information, that complies with international standards such as the Sendai Framework for Disaster Risk Reduction.

R6: Communication and sharing of CBDRM model and results with international organizations/agencies for enhanced synergies and learnings

It is strongly recommended that any future CBDRM-related projects should strengthen its communication/sharing platforms to engage in closer collaboration/synergies with international organizations/agencies on future CBDRM activities.