

Terminal Evaluation Report

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Final version

United Nations Trust Fund for Human Security (UNTFHS)

UN Joint Programme

PROMOTING SOCIAL EQUALITY IN THE GOBI-AREAS OF SOUTH MONGOLIA BY
FOSTERING HUMAN SECURITY WITH INTEGRATED AND PREVENTION APPROACHES

Project Reference No.: UDP-AS-09-079

Executing UN Organizations:

- (1) United Nations Development Programme, UNDP Country Office Mongolia
- (2) United Nations Children's Fund, UNICEF Mongolia
- (3) World Health Organization, WHO Mongolia
- (4) United Nations Population Fund, UNFPA Mongolia



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ACRONYMS

ALP	Alternative Livelihood Project
CBO	Community-based Organization
CFS	Child-friendly Schools
EMP	Enterprise Mongolia Project
GDP	Gross Domestic Product
GoM	Government of Mongolia
HH	Household
HS	Human Security
ICT	Information and Communications Technology
IWRM	Integrated Water Resource Management
JP	Joint Programme
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MEGD	Ministry of Environment and Green Development
MES	Ministry of Education and Science
MFI	Microfinance Institutions
MNT	Mongolian tugrik
MoH	Ministry of Health
MCUD	Ministry of Construction and Urban Development
OVI	Objectively Verifiable Indicator
PHC	Primary Health Care
PUSO	Public Utility Service Organization
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
UNICEF	United Nations Children’s Fund
UNFPA	United Nations Population’s Fund
UNTFHS	United Nations Trust Fund for Human Security
USD	United States dollars
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WSS	Water Supply and Sanitation

Mongolian terms

Aimag	‘Province’, primary administrative unit
Soum	Administrative unit below province
Bag	Lowest level of administrative unit
Khural	Local Citizen’s Representative Parliament
Dzud	Specific winter conditions that lead to much heavier losses, mainly in percentage of national herd

1. EXECUTIVE SUMMARY

Title:	Terminal Evaluation Report
Authors:	James Lenoci, International Consultant – Team Leader Ts. Bumkhorol, National Consultant
Date:	October 2013
Languages:	The terminal evaluation report was prepared in English and translated into Mongolian
Project:	UN Joint Programme: “Promoting Social Equality in the Gobi-Areas of South Mongolia by Fostering Human Security with Integrated and Prevention Approaches”
Funding Agency:	United Nations Trust Fund for Human Security (UNTFHS)
Coordinating UN Organization:	United Nations Development Programme
Executing UN Organizations:	United Nations Development Programme, UNDP Country Office Mongolia United Nations Children’s Fund, UNICEF Mongolia World Health Organization, WHO Mongolia United Nations Population Fund, UNFPA Mongolia
Non-UN Partners:	Ministry of Environment and Green Development Ministry of Construction and Urban Development Ministry of Education and Science Ministry of Health Ministry of Industry and Agriculture Mongolian Red Cross Society Local Government (Aimag and Soum authorities) Public Utilities Service Organizations (PUSOs) Mongolian National Chamber of Commerce and Industry Local NGOs and Community-based Organizations in the Gobi Areas
Country:	Mongolia
Target Region:	Six Soums were selected in three Aimags of the south Gobi Area: Gobi-Aitai Aimag: Bayan-Uul and Tugrug Soums Bayankhongor Aimag: Bayangobi and Shinejinst Soums Umnugobi Aimag: Bulgan and Tsogt-Ovoo Soums
Total project budget:	2,703,679 USD
Project Duration:	June 2010 to May 2013, with a no-cost extension through November 2013

Project Objectives

The UN Country team of UNDP, UNICEF, WHO, and UNFPA formulated a joint proposal that targeted south Mongolia, where people are vulnerable to a range of stresses, including limited access to resources and other socio-environmental circumstances shaped by political and economic processes. Upgrading social services and providing adaptation approach to climate change effects, is recognized as the best way to enhance the people's overall security not only in the short and medium, but also longer terms.

Implementing this project with a combination of 'top-down' protection and 'bottom-up' empowerment components, the project aimed to alleviate social inequality of most vulnerable populations affected by both serious poverty and climate change in South Mongolia (the Gobi-areas), enhancing their human security with these integrated, multi-sectoral and prevention measures. The project had five specific objectives, with each having **'top-down' protection** and **'bottom-up' empowerment** components (except for Objective 5, public outreach activities).

<i>JP Objectives</i>		<i>Responsible Agencies</i>
Objective 1 (water and sanitation)	<i>To increase the access to safe drinking water among the vulnerable community members severely affected by climate change, and build qualitative capacity of both local government and service providers in 6 pilot soums of the target Provinces (UNDP)</i>	UNDP
Objective 2 (education)	<i>To improve the quality of formal education through providing rights-based child- friendly schools that are inclusive, gender-sensitive, healthy, safe for and protective of children, involving their families and communities (UNICEF)</i>	UNICEF
Objective 3 (primary health care)	<i>To enhance the access and quality of people-centered primary health care (PHC) with gender-sensitive consideration, by reducing exclusion and integrating health into other multisectoral perspectives including climate change, gender and human rights (WHO and UNFPA)</i>	WHO and UNFPA
Objective 4 (job security)	<i>To provide the target communities with income generation opportunities through community-based organizations, in order to empower their economic security and sustain their livelihood (UNDP)</i>	UNDP
Objective 5 (public outreach and dissemination)	<i>To share the lessons-learned from this pilot initiative using the human security approach to wider audience of both national and regional stakeholders in Mongolia (UNCT Joint Initiative: UNDP (lead), UNICEF, WHO, and UNFPA)</i>	Joint UNCT (Lead-UNDP)

Terminal Evaluation Purpose and Methodology

The purpose of the terminal evaluation was to identify overall project management main findings and key lessons including examples of best practices for future projects in the country, region and UN agencies and UNTFHS.

The terminal evaluation was an evidence-based assessment and relied on feedback from persons who have been involved in the design, implementation, and supervision of the project, review of available documents and records, and findings made during field visits to representative target soums. The evaluation was made by a team of two independent evaluators: an international consultant/team leader responsible for overall direction and execution of the evaluation, and a national consultant responsible for assisting in evaluation interviews and document review, and translation of the terminal evaluation report.

Major Project Strengths and Achievements

The project provided tangible demonstrations of water and sanitation solutions

Resolving water supply and sanitation problems with both decentralized and centralized systems was successfully demonstrated during the implementation of the JP. For vulnerable groups in the target communities, including school children and the sick, decentralized water supply and sanitation was shown to be a viable approach to meet short to medium term needs.

The government plans of completing 50 centralized systems in 2014 and another 50 by the end of 2016 seems overly optimistic. Project has demonstrated that decentralized wells can provide short-term solutions that do not need to be considered redundancy if later connected to central system. Also, project demonstrated limited number and capacity of qualified contractors – more reason why the 50+50 soum plans is too optimistic- and why alternatives to centralized systems should be considered.

Local ownership and empowerment was well established during the project

The JP facilitated establishment of 13 community-based organizations (CBOs), which further adds to the level of local ownership. The JP also strengthened local governance linkages by arranging local public utility service organizations (PUSOs) to be responsible for operation and maintenance of the constructed and rehabilitated water and sanitation systems. This enhances the likelihood of sustainability and proper functioning of the facilities.

The educational component produced sustainable teacher and student participation

All the six schools in the target soums now develop and implement a school improvement plan based on the findings of the school self-assessment completed at the beginning and end of each academic year.

Child Development Centres (CDC) established in six soum schools and dormitories of the target provinces continue to function as a hub for promoting the activities of students' clubs, such as health and hygiene education, and student-led organisations as well as other extra-curricular activities.

Local health care was improved through capacity building and provision of equipment

The health care managers and staff have effectively adopted the primary health care approaches promoted by the project. A total of 2000 people including children, adolescents, women, elderly and members of other minority groups were involved in these community-based interventions in the six soums.

WHO provided basic supplies and equipment on sound health care waste management (HCWM) to 26 soums of 8 aimags within two UN Joint project. 20 soums of 5 aimags by first project and 6 soums of 3 aimags by this project were respectively provided by basic supplies and equipment on HCWM. Umnugobi aimag mobilized a fund and expanded this activity to 7 health facilities.

UNFPA Improved technical capacity to provide primary health services in all 6 local hospitals by providing the hospitals with 40 types of necessary PHC equipment.

Alternative livelihood potential enhanced by formation of 32 business groups

The project facilitated the formation of 32 alternative herder livelihood groups to produce mainly fodder, vegetables, and dairy products. Project participant expressed the benefits included division of labour allowing the group to take on multiple enterprises concurrently.

Key Shortcomings and Recommendations

PROGRAM MANAGEMENT AND COORDINATION

Results Level: Efficiency and effectiveness would have been enhanced with better joint programming

The JP executing agencies were effective in sharing experiences and communicating plans and progress, but there was limited joint programming. Procurement and construction works were carried out separately, field coordination and supervision was separate, financial accounting and reporting was separate and monitoring & evaluation was separate. There were comparative advantages realized through certain implementation modalities by individual agencies, but the shortcomings associated with the general lack of joint programming seems to outweigh the benefits realized by operating in parallel for some of the activities.

Recommendation: Capitalise on comparative advantages of UN agencies, and formulate a true joint effort. The efficiency of the JP could have been improved by jointly procuring construction of water and sanitation infrastructure and sharing field coordination and supervision.

- ✓ Joint monitoring field trips were introduced in the latter part of the implementation period in order to evaluate joint responses to issues faced by the agencies. In hindsight, designing joint field coordination and supervision as an implementation modality, e.g., sharing one social mobilizer and/or field coordinator in each of the target soums, might have resulted in improved efficiency and effectiveness;
- ✓ Joint financial accounting and reporting;
- ✓ Joint procurement of complementary works (e.g., water supply wells, supply pipelines, indoor WASH, septic, improved latrines, etc.);
- ✓ Assign one person responsible for coordinating and reporting monitoring & evaluation efforts from each of the JP partners

Recommendation: Certain interventions seem to be best managed by individual agencies, due to developed and efficient implementation modalities. For example, the child-friendly school program (UNICEF with the Ministry of Education), primary health care training (WHO with the Ministry of Health), and provision of primary health care equipment (UNFPA with the Ministry of Health).

Design Level: Insufficient resources allocated to monitoring & evaluation

There were resources budgeted for monitoring & evaluation (M&E), but the budgeted activities were not related to M&E in all cases, some planned M&E activities were not carried out, and there was limited evidence of whether and how the money was spent.

Recommendation: All of the donor and implementing agencies in this project have extensive M&E experience. Benchmarks of many of the activities engaged in during the JP

are most likely available for internal audits, and should be made available to the project as goals, and compared to project results during the mid-term and final evaluation.

Design and Process Levels: Field coordination was inconsistent and not coordinated among executing agencies

There was evidence during the terminal evaluation mission that more consistent field coordination might have improved project effectiveness.

Recommendation: For similar projects, engage project-level field coordinators and/or social mobilizers to improve the lines of communication between the implementation staff in Ulaanbaatar and the field, and also more frequently communicate with the soum centre authorities and other local targeted stakeholders.

WATER AND SANITATION

Design and Process Levels: Some of the vulnerable communities within the targeted soums lack access to water and sanitation at the end of the project

The project contributed measurably to securing adequate water and sanitation to some of the vulnerable communities among the targeted soums, but some users remain without access:

The main water and sanitation target was to have 80% of the households to gain access to improved water and sanitation facilities. Baseline was 10% and the level of achievement reported by the JP mostly includes improved public water supply and sanitation that would be attained when construction of the designed soum infrastructure is realized. . The soum communities have indeed benefited in being more prepared for eventual improved water and sanitation through completion of the design drawings supported by the JP. But the point needs to be made that, as a human security project, priority should have been made on getting “actual” access. The evaluation team considers that counting designs as improved access is an over-estimation of achievement. The target aimed to achieve 80% of the households with access to improved water and sanitation. Among the 6 target soums, water supply was improved in one soum (Bulgan), water supplies were constructed for 3 school complexes and in 1 health care facility. And, sanitation improvements were made at school complexes in 5 soums. The evaluation team was not provided with monitoring metrics showing the number of households with improved water and sanitation. Considering the above-listed accomplishments, baseline conditions were not significantly changed during the lifespan of the project, as the designed centralized systems are pending government funding.

Recommendation: Decentralized water sources, particularly for vulnerable groups such as schools and health care facilities, should be considered for any soum that are 2 years or more away from getting funding for a centralized facility. This may not be in alignment with national priorities, but it is in alignment with MDGs. In this case, shift budget funds away from designing centralized facilities and into constructing actual interim supply sources, particularly for vulnerable members of the communities.

Design Level: Under-estimated costs and timeframes for water and sanitation interventions

With respect to the water and sanitation interventions that were included in the project document, the problems were not adequately identified at the project preparatory phase and, consequently, costs and timeframes for the planned activities were significantly underestimated and impracticable. In addition, local capacity assessment especially on availability of

Aimag level drilling companies, construction companies was not done during the project design phase.

Recommendation: Before funding a project component with construction activities, complete preliminary design so that technical requirements are known and more accurate cost estimations and timeframes can be made.

Design Level: Integrated water resources management was not promoted and insufficient focus on climate change adaptation during water supply planning

Water resources are scarce at the targeted soums, and water resource management was observed to be a bit arbitrary, i.e., there is generally a lack of water supply management and water demand management. The target soums are highly vulnerable to climate change impacts, but very little emphasis was placed on climate change adaptation in the water supply planning efforts made. Using UNDP's comparative advantage, integrated water resources management and water demand management should have been promoted in the project design, possibly at one of the target soums as a pilot case.

Design and Process Levels: Water quality of drinking water resources was insufficiently characterized and portable testing equipment provide limited value

The water quality of the constructed and/or rehabilitated water supply wells and springs was not sufficiently characterized to ensure that drinking water guidelines are fulfilled. Water quality characterization should have been part of project design and budget. Parameters of health-significance cannot be tested with the portable water laboratories provided to the soums by the project.

Recommendation: Constructed and/or upgraded sources of water should be tested for minimum, health-based drinking water quality parameters including arsenic, barium, boron, chromium, fluoride, and selenium (WHO Drinking Water Quality Guidelines, 4th edition, 2009) in addition to microbiological parameters known to be prevalent in animal husbandry-based herder communities. Supply networks should be regularly disinfected and representative samples tested frequently by independent laboratories for microbiological parameters.

Design and Results Level: Hygienic protection of water supply springs do not fulfil purpose

During the field mission, one of the protected water supply springs and one protected springs were visited. At both locations visited, the gate to the fence was either open (Bulgan) or missing (Bayangobi), and livestock faeces were observed right at the spring source at the location near Bayangobi. Furthermore, the evaluation team was informed that the remote spring near Bayangobi is used by many of the villagers for drinking purposes, as the people believe the water has healthful properties. Signage was lacking at both sites; for example, no signs indicating that livestock is prohibited inside and why.

The fact that operation and maintenance of these protected springs could not be ensured during the lifespan of the JP, concerns are raised regarding the sustainability of these improved systems.

Recommendation: In the opinion of the terminal evaluator, spring boxes should be installed at each of the protected springs, per international good practice. The cost for providing spring boxes would not have been prohibitive, and would have offered the required

protection, particularly considering that the fenced solutions are not respected by local herders.

EDUCATION

Results Level: Limited metrics available

There were no metrics available regarding how effective the children-friendly school programs have been in the target soums (or in other parts of the country). Also, Activity 2.2 states that 80% of school children in the target areas will have access to improved water and sanitation facilities. The reporting contains no information as to whether this objective was achieved or not.

Recommendation: Local teachers and school administrators were observed to be proactively engaged in carrying out impact assessments. Data from these assessments should be compiled and metrics prepared to allow more quantitative evaluation.

PRIMARY HEALTH CARE

Results Level: Resources for upkeep and replacement of health care equipment and supplies limited

While JP PHC interventions were inclusive, community-needs based, and had considerable impact; continued funding is the number one concern for the sustainability of these positive results. Medical Equipment and supplies provided by UNFPA account for 92% of the hospital needs. But soum hospitals found it difficult to increase annual operating budget to cover increased operation/replacement costs.

Recommendation: Donor agencies should continue working with Ministry of Health officials, share experiences from other countries, and review financing decisions for soum level hospitals and investigate funding mechanisms that could result in higher quality and more sustainable delivery of community health care service.

Results Level: Local health care waste management not coordinated at the local level

The improvements made at the soum hospitals in health care waste management are a significant improvement over techniques used before the JP project support. The evaluation team feels that safe disposal of health care wastes requires coordination between the health care facility managers and soum authorities, as well as controls in place at the disposal facility. Without resolving these issues, risks to the community cannot be excluded.

Recommendation: There is a pressing need for improving overall community waste management at the soum levels especially as it relates for pathogen dense health care waste. Donors need to jointly support along with the MEGD to secure these wastes and communicate to community members the dangers of exposure and mishandling.

ALTERNATIVE LIVELIHOODS (JOB SECURITY)

Results Level: More Professional Approach to Market Access and Sales Needed

This project did an excellent job at opening the minds of and exposing vulnerable herding populations to alternative livelihoods. The project also did an excellent job providing the tools to take advantage of those opportunities. However, certain business functions including sales in

distant markets do not come naturally or easily to new-to-business herders and may be better outsourced.

Recommendation: In future ALP projects, consider hiring a regional marketing representative to cover Ulaanbaatar or regional markets to routinely and consistently follow up with buyers and provide periodic (monthly off season, weekly on season) sales/market reports to producer groups. This can be done through established product brokers or hiring directly a dedicated marketing representative. This position may need to be funded in part by donor funds so that market links are formed. This recommendation might be opposed to the “no-direct intervention in business” stance UN business development interventions have held, it may exactly be these supported direct business interventions that are the most effective in achieving impact and sustainability.

Process Level: Income Metrics Not Collected/Reported on Income Improvement ALP Interventions

The Objectively Verifiable Indicators of “Average % of the increase in sales income of the business groups” and “# of jobs with business groups” (Activity 4.2) were not reported. There was not only a problem with the JP ALP project, but the same problem was evident in the national ALP and EMP-2 initiatives. If a major goal of the project is to provide higher income, income should be measured to determine project effectiveness, efficiency, and impact.

Recommendation: For the ALP participants, as a condition for programmatic support, beneficiaries have to begin to establish business records and reporting to determine the effectiveness of ALP interventions.

Results Level: Microfinance is a Necessity for Sustainability and Natural Disaster Insurance

One very clear indicator of the sustainability of any kind of business venture, social or otherwise, is the ability to find and attract financial capital. Unfortunately, the JP progress reports do not provide information pertaining to Activity 4.4, which states that “at least 50% of the business groups receive microfinance from formal financial institutions with the support/facilitation from the project”.

Recommendation 4.4: Microfinance is clearly needed for the most vulnerable groups. The EMP has shown that by mixing higher income with lower income members, some herder groups can get loans because they can be collateralized sufficiently for commercial banks in the LGF program. However, that is of little comfort for the zero/low collateral herder groups who are the most vulnerable beneficiaries. The next ALP project needs to follow through on the micro-financing component (Activity 4.4) because without access to capital, these business development interventions evaporate when donor funding stops. Access to capital also acts as a hedge against natural disaster, i.e., it provides a financial bridge from onset of the natural disaster to the recovery.

PUBLIC OUTREACH AND DISSEMINATION

Design and Results Levels: Low level of understanding of human security concept observed

Awareness of human security concepts was found to be generally low among interviewed stakeholders, including government agency officials and soum governors, teachers, and health care directors.

Recommendation: More effort should have been made at the project development stage mapping out the HS impacts, etc., and designing the project around those results. Also, sustainability of training efforts could have been enhanced by training the local teachers to deliver the human security training.

Evaluation Ratings

Objective	DESIGN	PROCESS LEVEL		RESULTS LEVEL	
	Relevance	Efficiency	Ownership	Effectiveness	Sustainability
Objective 1: Water-Sanitation	3	4	3	3	3
Objective 2: Education	2	2	2	2	2
Objective 3: Primary Health Care	2	2	2	2	2
Objective 4: Job Security	3	3	3	3	3
Objective 5: Outreach	4	3	4	4	4
Overall Project	3	3	3	3	3

<u>Rating Description:</u>	<u>Rating Score:</u>
Excellent:	1
Good:	2
Satisfactory:	3
Unsatisfactory:	4
Not applicable:	5
Insufficient information:	6

2. INTRODUCTION

2.1. Evaluation Objectives

The terminal evaluation has the following specific objectives:

- To assess the extent the JP has contributed to solving the needs and problems identified in the feasibility study and/or baseline survey;
- To ascertain the degree of implementation, efficiency and quality delivered on outputs and outcomes against what was originally planned or subsequently officially revised;
- To measure to what extent the JP has attained development results for the targeted population, beneficiaries, participants including individuals, communities and institutions using the logical framework;
- To assess the joint project contribution to the objectives set in the Comprehensive National Development Strategy based on Education, Health, Livelihood, Water Supply and Sanitation MDG at national and local levels, and;
- To identify lessons learned and good practices as a result of the JP implementation within the various programme components with the aim to support the sustainability of the JP or some of its components.

2.2. Evaluation Scope and Methodology

The terminal evaluation was an evidence-based assessment and relied on feedback from persons who have been involved in the design, implementation, and supervision of the project, review of available documents and records, and findings made during field visits to representative target soums

The evaluation was made by a team of two independent evaluators: an international consultant/team leader responsible for overall direction and execution of the evaluation, and a national consultant responsible for assisting in evaluation interviews and document review, and translation of the terminal evaluation report from English to Mongolian. The evaluation was carried out during the period September-October 2013 and included the following activities:

- An evaluation field mission from 10-18 September 2013 (the itinerary is compiled in **Annex 1**), including field visits to two representative target soums: Bulgan and Bayangobi soums (the itinerary of the field trip is outlined in **Annex 2**). Consultative meetings were held with the following organizations and individuals: (UNDP, UNICEF, WHO, UNFPA, Ministry of Environment and Green Development, Ministry of Health, Ministry of Education and Science, Ministry of Construction and Urban Development, Ministry of Industry and Agriculture, aimag authorities, soum authorities, local beneficiaries (teachers, doctors, operators, etc.) and project staff.
- A desk review of relevant sources of information, including the project document and project's reports including annual progress reports/PIR, rapid assessment report, training manuals and hand-outs, design drawings, design guidelines and standards, financial records, national strategic and policy documents, and any other materials that the evaluators considered useful for this evidence-based evaluation. A list of the documents reviewed is compiled in **Annex 3**.

- The project logical results framework was used as an evaluation tool, in assessing attainment of project objectives. The logical results framework for each objective was evaluated against SMART criteria, as defined below in **Exhibit 1**.

S	Specific: Outcomes must use change language, describing a specific future condition
M	Measurable: Results, whether quantitative or qualitative, must have measurable indicators, making it possible to assess whether they were achieved or not
A	Achievable: Results must be within the capacity of the partners to achieve
R	Relevant: Results must make a contribution to selected priorities of the national development framework
T	Time-bound: Results are never open-ended. There should be an expected date of accomplishment
Exhibit 1: SMART criteria definitions	

- At the end of the evaluation field mission, the team leader drafted a set of initial findings and presented them on 18 September 2013 to key executing agency stakeholders and at a debriefing with the UNDP resident representative.

For quality assurance, evidence gathered during the evaluation mission was cross-checked between as many sources as practicable, in order to validate the findings.

The PIU provided the evaluation team with support to obtain necessary and requested documentations and logistical assistance during the evaluation mission.

2.3. Evaluation Criteria

The terminal evaluation was carried in accordance with the requirements outlined in the Terms of Reference and the monitoring & evaluation guidelines and policies of the UNDP.

The following evaluation aspects were analysed:

- Relevance: Extent to which a development initiative and its intended outputs are consistent with national and local policies and priorities and the needs of intended beneficiaries.
- Effectiveness: Extent to which the initiative’s intended results have been achieved.
- Efficiency: Measure of how economically resources or inputs (such as funds, expertise and time) are converted to results.
- Sustainability: Measure of the extent to which benefits of initiatives continue after external development assistance has come to end. The following aspects of risks to sustainability were assessed:
- ✓ Institutionalization
 - ✓ Policy Change
 - ✓ Community Ownership, Changing Community Norms
 - ✓ Resources

The above evaluation aspects were also rated according to the following scale:

Rating:	<u>Excellent</u>	<u>Good</u>	<u>Satisfactory</u>	<u>Unsatisfactory</u>	<u>Not applicable</u>	<u>Insufficient Information</u>
Score:	1	2	3	4	5	6

Following the relevant sections of the Human Security Handbook (*Application of the Human Security Concept and the United Nations Trust Fund for Human Security*, 2009), a condensed human security impact assessment was carried out to evaluate the potential longer term consequences of the programme.

Finally, the evaluation summarizes the major achievements and weaknesses of the project, presents recommendations for reinforcing and following up on initial benefits, and identifies lessons and good and best practice.

2.4. Ethics

The terminal evaluation was conducted in accordance with the UNEG Ethical Guidelines for Evaluators, and the evaluation team has signed the Evaluation Consultant Code of Conduct Agreement form (see **Annex 4**). In particular, the team ensures the anonymity and confidentiality of individuals who were interviewed and surveyed. In respect to the UN Declaration of Human Rights, results were presented in a manner that clearly respects stakeholders' dignity and self-worth.

2.5. Limitations

The evaluation team assumes that the information obtained over the course of the evaluation time period is representative. As time and budget were limited, only two of the six target soums were visited during the evaluation mission.

3. PROJECT DETAILS

3.1. Background

Taking into account the future impact of climate change on socio-economic situation, the UN Country Team of UNDP, UNICEF, WHO and UNFPA, formulated a joint programme that targeted south Mongolia, where people are very vulnerable to a range of stresses, depending on factors such as access to resources and other socio-environmental circumstances shaped by political and economic processes. Upgrading social services and providing adaptation approach to climate change effects, is recognized as the best way to enhance the people's overall security not only in the short and medium, but also longer terms. The project therefore supported specifically a five-prong intervention with interrelated components as follows: (1) increasing the access to safe drinking water among the vulnerable community members severely affected by climate change (by UNDP), (2) improving the quality of formal education through providing rights-based child- friendly schools (by UNICEF), (3) enhancement of the access and quality of people-centred primary health care (PHC) with gender-sensitive consideration (by WHO and UNFPA), (4) provision of income generation opportunities through community-based organizations (by UNDP), and (5) Promoting the mainstreaming and advocating of the Human Security Concept (all Agencies led by UNDP).

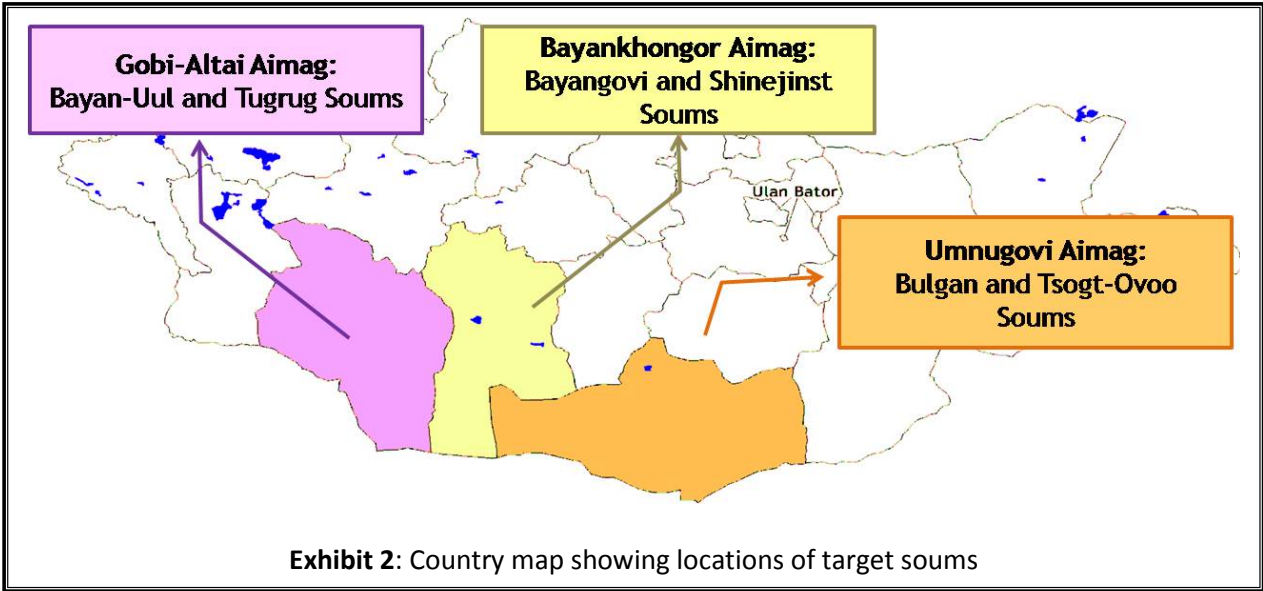
Identification of the JP dates back to 2006 and started with undertaking a large-scale study involving 1500 mainly rural households (UNDP, WHO and UNICEF, 2004). The study revealed significant disparities in urban and rural areas in terms of access to basic social services. The approved joint programme was an integral part of the follow-up efforts to the results and recommendations of the above mentioned study towards achieving the MDGs.

Based on the recommendations, the participating agencies have defined their areas of interventions by consulting with their Government counterparts and stakeholders, each of which were supported by an international comparative expertise. The whole process led to a conclusion that the agencies should integrate their efforts, followed by a workshop to formulate a JP in 2006.

In addition, while carefully studying the concept of human security, the UNCT realized that the planned activities would meet all of requirements set forth by the UNTFHS’ Guidelines. Throughout 2006-2009, while the climate change issue had also become very critical for Mongolia’s human security agenda, the joint programme and its activities were developed and planned accordingly in close consultation with the government counterparts, climate change specialists, in order to clearly analyse the issues in Mongolia and also to increase effectiveness and reduce duplication of efforts with other funded activities.

Throughout the process, the local Governor offices were consulted on selection of target sites and proposed activities. The central and local governments expressed their commitment in collaboration on the proposed project and provided socio-economic data and statistics of their localities. In addition to the statistics and data provided by the central and local government, the findings of the recent studies conducted by the participating UN agencies have formed a strong basis in developing the proposal. These include national human development report, the second MDG report, studies on internal migration dynamics, decentralization framework and local service delivery, needs assessment on institutional, regulatory framework and human resources on water governance, etc.

Interventions were delivered in a total of 6 target soums: two in each of the three target south Gobi aimags (see country map in **Exhibit 2**).



3.2. Timeline

Key project dates are listed below:

- Project Development:** 2006-2009
- Approval Date:** May 2010

Implementation start date: June 2010
Project completion date: November 2013
Terminal evaluation date: October 2013

3.3. Objectives

Implementing this project with a combination of ‘top-down’ protection and ‘bottom-up’ empowerment components, the project aimed to alleviate social inequality of most vulnerable populations affected by both serious poverty and climate change in South Mongolia (the Gobi-areas), enhancing their human security with these integrated, multi-sectoral and prevention measures. The project had five specific objectives, with each having **‘top-down’ protection** and **‘bottom-up’ empowerment** components (except Objective 5, public outreach activities).

JP Objectives		Responsible Agencies
Objective 1 (water and sanitation)	<i>To increase the access to safe drinking water among the vulnerable community members severely affected by climate change, and build qualitative capacity of both local government and service providers in 6 pilot soums of the target Provinces (UNDP)</i>	UNDP
Objective 2 (education)	<i>To improve the quality of formal education through providing rights-based child- friendly schools that are inclusive, gender-sensitive, healthy, safe for and protective of children, involving their families and communities (UNICEF)</i>	UNICEF
Objective 3 (primary health care)	<i>To enhance the access and quality of people-centered primary health care (PHC) with gender-sensitive consideration, by reducing exclusion and integrating health into other multisectoral perspectives including climate change, gender and human rights (WHO and UNFPA)</i>	WHO and UNFPA
Objective 4 (job security)	<i>To provide the target communities with income generation opportunities through community-based organizations, in order to empower their economic security and sustain their livelihood (UNDP)</i>	UNDP
Objective 5 (public outreach and dissemination)	<i>To share the lessons-learnt from this pilot initiative using the human security approach to wider audience of both national and regional stakeholders in Mongolia (UNCT Joint Initiative: UNDP (lead), UNICEF, WHO, and UNFPA)</i>	Joint UNCT (Lead-UNDP)

3.4. Budget

The 2,703,697.21 USD project budget broken down by objective is indicated below.

Objective	Budget Cost (USD) (% of total)
Objective 1 (water and sanitation)	608,300 (24%)
Objective 2 (education)	669,333 (26%)
Objective 3 (primary health care)	635,500 (25%)
Objective 4 (job security)	441,500 (17%)
Objective 5 (public outreach and dissemination)	23,670 (1%)
Project Management	148,500 (6%)
Sub-Total	2,526,803
Programme Support Cost (All agencies with PSC rate of 7%)	176,876.21 (7%)
Grand Total	2,703,697.21

4. EVALUATION FINDINGS

4.1. Objective 1: Water and Sanitation

Objective 1: *To increase the access to safe drinking water among the vulnerable community members severely affected by climate change, and build qualitative capacity of both local government and service providers in 6 pilot soums of the target Provinces (UNDP).*

LOGICAL RESULTS FRAMEWORK:

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
Output 1.1: <i>Up to 80 percent of households in the target area have access to improved water sources and sanitation facilities</i>	<i># of wells created and rehabilitated # of public baths created # of protected water sources # of events organized % of community members satisfied % of households with access to improved water sources and sanitation facilities by 2012</i>	The target for this output is specific, measurable, and relevant. However, due to under-estimated costs and implementation timeframes, the likelihood of achieving the 80% is low.
Output 1.2: <i>At least one CBO in each soum established and its operation become sustainable to manage drinking water source, public bathhouse and solid waste collection.</i>	<i># CBO members trained # CBOs created # of facilities managed and operated by CBOs % of community members satisfied with the service % of increased income for CBO members (financial sustainability)</i>	This target was not adjusted to reflect changes in project scope, e.g., public bath houses were not constructed, and waste collection was not established in the target soums. There was no timeframe indicated for achieving sustainable operation of the CBOs in managing the public

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
		services, and there was no mechanism designed to measure this.
Output 1.3: <i>A policy and regulatory framework developed and piloted with a specific focus on rural Water Supply and Sanitation (WSS) as climate change adaptation measures.</i>	<i># study finding discussed and validated by the policy makers # of piloted soum level WSS management structure # of trained personnel</i>	The indicators for this target do not address whether the intended outcome was achieved.

COMPLEMENTARY OUTPUTS UNDER OBJECTIVE 2 (EDUCATION):

Output 2.2: <i>80 percent of school children in the target areas will have access to improved water and sanitation facilities</i>	<i># of WATSAN facilities built # of school children with access to improved water source and sanitation # of IEC materials developed of teachers, caregivers and students participated in training and % of people improved their knowledge on M&O and latrine construction # of families constructed households latrines</i>	This target fulfils SMART criteria, but it would have been advisable to included details on how knowledge retained was to be measured.
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COMPLIMENTARY OUTPUTS UNDER OBJECTIVE 3 (PRIMARY HEALTH CARE):

Output 3.2: <i>6 pilot soum health facilities improved for quality health services and with safe water, sanitation and health care waste disposal facilities in place as models for communities</i>	<i># of soum health facilities with improved water, sanitation and health care waste disposal</i>	The water and sanitation needs were not fully known at the time of project development; needs assessment made after implementation started. This target should have been adjusted after information was gathered on what specific interventions would be made.
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BASELINE:

- ✓ Approximately 10% of the people in the target soums had access to safe water supply.
- ✓ There were no community-based organizations responsible for water supply.
- ✓ None of the schools in the target soums had indoor WASH facilities or improved sanitation.
- ✓ None of the hospitals had improved sanitation facilities.

ACCOMPLISHMENTS:

1. UNDP conducted a WSS feasibility study for each of the 6 target soums.
2. UNDP procured development of detailed design drawings for construction of centralized water supply and sewerage pipeline system and wastewater treatment plant for public buildings including health care centre, schools, dormitory, kindergarten and governor's office in 4 of the soums: Bulgan, Bayan-Uul, Bayangobi, and, Tsogt-Ovoo.

3. UNDP completed civil works on construction of water reservoir, and reconstruction of water supply pipeline and three distribution kiosks in Bulgan soum.
4. UNDP procured construction of water source hygiene protection for the existing deep well at soum centres with the community involvement in 2 of the soums: Bayan-Uul, Tugrug.
5. UNDP provided fenced protection of 10 springs with herders involvement; Bayangobi and Shinejinst soums of Bayankhongor aimag and Tugrug and Bayan-Uul soums of Govi-Altai aimag.
6. UNDP procured provision of the Portable Laboratory Tool for water quality monitoring in conjunction with the provision of training and re-training for the local officials on the calibration, hands-on experience and establishment of water quality database locally in all 6 soums: Bayan-Uul, Tugrug, Bayangobi, Shinejinst, Bulgan, and Tsogt-Ovoo.
7. UNDP procured recycling bins and small-scale equipment for waste pressing, shredding, and melting the recycled and reusable solid wastes. And, they provided training on waste segregation good practice and on recycling/re-use in each of the 6 target soums.
8. UNICEF procured construction of two groundwater wells for potable water supply for school complexes in two soums: Bayan-Uul and Shine-Jinst.
9. UNICEF tried to construct a well in Tugrug but two attempts failed to find sufficient water. A third attempt is under preparation.
10. With support from UNICEF, the Red Cross has provided outdoor Ventilated Improved Pit (VIP) latrines for schools in 3 soums: Bayan-Uul, Tugrug, and Bayangobi.
11. With support from UNICEF, the Red Cross will provide outdoor latrines for schools in 3 soums: Shinejinst (80% complete at time of evaluation mission), Bulgan (80% complete at time of evaluation mission), and Tsogt-Ovoo (80% complete at time of evaluation mission). The evaluation team was informed that these installations have been 100% completed by the end of October 2013.
12. UNICEF provided indoor WASH facilities for schools in 3 soums: Bayangobi, Shinejinst, and Tsogt-Ovoo.
13. UNICEF investigated providing indoor WASH for schools in Bulgan but found the cost prohibitive under current project budget. Therefore, indoor WASH facilities were not built and only the outdoor VIP latrines were built.
14. WHO provided design of installation for hospital well and indoor sanitation facilities in Bayan-Uul. Construction was procured by the Ministry of Health and financed by project.
15. WHO provided design for ventilated improved pit latrine for hospital in Tugrug. Construction was procured by the Ministry of Health and financed by project.
16. WHO provided the design of outdoor pipe connection at hospitals in 3 soums: Bayangobi, Shinejinst, and Bulgan. These works were procured by Ministry of Health and financed by the project.
17. WHO provided the design of new deep well drilling in Shinejinst soum of Bayankhongor aimag. Construction was procured by the Ministry of Health and financed by project.

STRENGTHS & HIGHLIGHTS:

Tangible demonstrations of water and sanitation solutions

Resolving water supply and sanitation problems with both decentralized and centralized systems was successfully demonstrated during the implementation of the JP. For vulnerable groups in the target communities, including school children and the sick, decentralized water supply and sanitation was shown to be a viable approach to meet short to medium term needs. Taking into account that the government has welcomed the centralized water and sanitation guidelines that the UNDP facilitated through the complementary GoAL-WASH project, and the UN agencies are similarly well positioned to share lessons on decentralized systems.

- ✓ There is evidence of improved access in some of the soums, but the water supply interventions were made this year, so there is no experience yet in the winter, which is problematic there (freezing pipes, etc.). The pipeline construction works, however, were done following the national standards and norms which take into account winter conditions.
- ✓ The JP facilitated establishment of 13 community-based organizations (CBOs), which further adds to the level of local ownership. The JP also strengthened local governance linkages, e.g., through arranging local public utility service organizations (PUSOs) to be responsible for operation and maintenance of the constructed and rehabilitated water and sanitation systems enhances the likelihood of sustainability of the proper functioning of the facilities.
- ✓ Both WHO and UNICEF have been working for several years on decentralized water and sanitation for hospitals and schools.

Support toward MDG Water and Sanitation Road map

Experience gained and lessons learned during the JP complemented the initiatives facilitated under the GoAL-WASH Project, coordinated by the UNDP. The GoAL-WASH project successfully assisted the government in preparing the country MDG road map. The findings of the water and sanitation MDG analysis indicated that the country is already exceeding their 2015 goal for access to safe drinking water, while the sanitation status lags behind the 2015 target. Consequently, the government is planning to commit more funding into sanitation projects. This points out how the experiences gained by the UN agencies during implementation of the JP can add value to the government nation-wide plans.

- ✓ Interview at the Ministry of Construction and Urban Development: generally satisfied with the results of the MDG for water supply, and therefore government has decided to spend more funds on sanitation. There are a number of soums under the average for water supply, so still many without proper supply.
- ✓ The government plans of completing 50 centralized systems in 2014 and another 50 by the end of 2016 seems overly optimistic. The JP project has demonstrated that decentralized wells can provide short-term solutions that do not need to be considered redundancy if later connected to central system. For both hospitals and schools, alternative water supplies seem to be a good idea in these communities. Also, the JP project demonstrated the limited number and capacity of qualified contractors, i.e., more reason why the 50+50 soum plans is too optimistic.

- ✓ As the MDGs are averages, there are inherently many communities on the low end of the scale, e.g., where decentralized solutions might provide stop-gap access to safe water and proper sanitation over the short to medium timeframe.
- ✓ Decentralized wells provided water supplies at hospitals and schools in some of the target soums.

SHORTCOMINGS AND RECOMMENDATIONS:

Design, Process, and Results Levels: Some of the vulnerable communities within the targeted soums lack access to water and sanitation at the end of the project

The project contributed measurably to securing adequate water and sanitation to some of the vulnerable communities among the targeted soums, but some users remain without access.

One of the targets was to have 80% of the households to gain access to improved water and sanitation facilities. Baseline was 10%, which was not significantly improved over the lifespan of the project implementation. . The evaluation team considers that counting designs as improved access is an over-estimation of achievement. There is no guarantee that the government will approve financing and complete construction within the short-term. While it is true that the project efforts have contributed to community preparedness by having design drawings ready, but again, this was not the target objective.

- ✓ Bulgan soum: no water supply for the school, kindergarten, dormitory (this was not part of the UNICEF project scope). Only outdoor VIP latrines built; indoor WASH facilities work cancelled due to insufficiency of funds.
- ✓ Tsogt-Ovoo soum: no water supply for the school, kindergarten, dormitory. The project did finance design drawings for a centralized system water and sanitation system for public buildings in the soum.
- ✓ Bayangobi soum: kindergarten received water supply from other donor intervention, but there is no sanitation connection (e.g., septic tank) so they cannot effectively use the supplied water. The project did finance design drawings for a centralized system water and sanitation system for public buildings in the soum.
- ✓ Tugrug soum: no water supply or sanitation for hospital and governor's house, and UNICEF hopes that third try to construct groundwater well for supplying school, kindergarten, and dormitory will be successful (the first two attempts failed to find water). According to the feasibility study completed for the project, the nearest reliable water source is located approx. 13 km from the soum centre.
- ✓ Bayaan-Uul soum: no water supply or sanitation for governor's house. School and dormitory were connected with water supply system. The project did finance design drawings for a centralized system water and sanitation system for public buildings in the soum.
- ✓ Shinejinst soum: no water supply or sanitation for governor's house. School and dormitory were connected with water supply system. According to the feasibility study, this soum has a deep well but the water quality is unsuitable. UNDP conducted bidding for rehabilitating the deep well, but due to the extremely high price proposal received; this activity cancelled. With the joint coordination, UNICEF decided to conduct

geophysical survey for new well near by the school and dormitory within the specific agency scope.

According to estimates made by the UNDP PIU staff, if the design WSS infrastructure is fully built out, then the goal of providing improved water supply to 80% of the HHs in the targeted communities would be achieved, while approximately 50% of the households would gain improved sanitation. This is another indication of a project design shortcoming, i.e., there seems to have been a lack of understanding of the inherent circumstances in the soum centres, for example, with respect to providing improved sanitation on the household level. Due to the layout of the soums and high costs for constructing sewerage, individual solutions or a cluster approach is likely more reasonable than centralized sanitation. The detailed design drawings supported by the project include centralized sanitation for public buildings in the soum centres, but these systems do not cover the majority of the residential households.

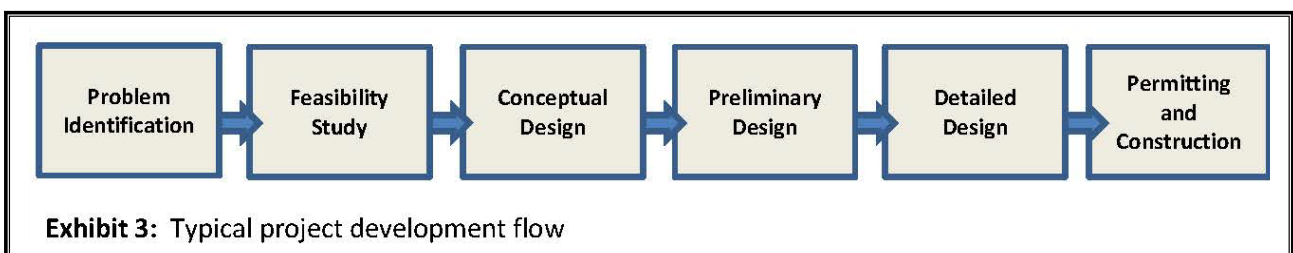
There were also missed opportunities for better coordination among the executing agencies during the implementation phase. Decentralized solutions could have provided water supply for schools, kindergartens, and dormitories, rather than waiting for funding and construction of centralized water and sanitation systems for all public buildings.

The shift of providing detailed design drawings for centralized water and sanitation systems, in lieu of the decentralized interventions included in the project design, seems to be in line with the government emphasis on building centralized infrastructure. The government has adopted a national strategy to provide centralized water and sanitation for public buildings in soum centres, starting with 50 soums in 2014 and a further 50 by the end of 2016. However, as there are 330 soums in the country, it will take several years to realize these plans nation-wide. Addressing the pressing human security needs related to access to clean water and sanitation in the target communities could have been better reconciled with longer term planning.

Recommendation 1.1: Consider decentralized water sources for any soum that is 2 years or more away from getting funding for a centralized facility. This may not be in alignment with national priorities, but it is in alignment with MDGs. In this case, shift budget funds away from designing centralized facilities and into constructing actual interim supply sources.

Design Level: Under-estimated costs and timeframes for water and sanitation interventions

With respect to the water and sanitation interventions that were included in the project document, the problems were not adequately identified at the project preparatory phase and, consequently, costs and timeframes for the planned activities were significantly underestimated and impracticable. Referring to the typical project development flow for a water-sanitation intervention (see **Exhibit 3**), in order to accurately estimate construction costs and times, technical requirements determined during the preliminary design phase should be worked out. The budget costs and timeframes for the water and sanitation interventions in JP project were estimated without even fully completing the problem identification stage.



Some examples of unrealistic cost estimates and timeframes that are included in the approved project proposal are indicated below.

- ✓ Under Activity 1.1.2 (*Rehabilitate or establish water sources, public bathhouses and waste water treatment facilities connecting public buildings in 6 soum centres*), the budget cost was 244,200 USD, for all 6 soums. The engineer's cost estimate for the centralized water and sanitation system for public buildings at the Bayangobi soum was approx. 780 million MNT (approx. 475,000 USD). The actual cost for upgrading the water supply spring protection infrastructure in the Bulgan soum and drinking water supply network, including refurbishment of 3 kiosks in the soum centre was 201,672 USD. The actual cost for the centralized water and sanitation system for public buildings in the Zereg soum, which was completed under the UNDP AusAID-funded project, was 650,000 USD.
- ✓ Under Activity 1.1.2 (*Rehabilitate or establish water sources, public bathhouses and waste water treatment facilities connecting public buildings in 6 soum centres*), 35% of the cost was planned in Year 1 of the implementation, and the remaining 65% in Year 2. The feasibility study was planned to be completed also in Year 1.
- ✓ Under Activity 1.1.3 (*Improve water supply by establishing wells for drinking water source*), 3 groundwater wells were planned, one in each aimag. The estimated cost for the 3 wells was 24,000 USD and they would be built in Year 1, the same year when geophysical surveys would be carried out to assess the possible presence of deep groundwater. No wells were constructed under this activity, but under Activity 2.2.1 (*Provision of WASH facilities in 6 target schools*), 27,000 USD was allocated for construction of 3 wells. UNICEF has procured construction of three wells at an actual cost of approx. 100,000 USD, and the third well was not completed in October 2013, which is near the end of the project, including the 6-month time extension.
- ✓ Under Activity 1.1.5 (*Protection of 2 water sources each for improved management, in and outside the Soum centres*), 6,000 USD was allocated for protecting 12 springs and water sources. The actual cost was a bit more than 24,000 USD, and the completed work was not made according to international best practice, e.g., spring boxes were not built as part of the protection systems. Again, the work under this activity was to be completed in Year 1 (one-third of the total cost) and Year 2 (two-thirds of the total cost).
- ✓ Under Activity 2.2.1 (*Provision of WASH facilities in 6 target schools*), an unrealistic budget of 40,000 USD was estimated for the indoor WASH facilities, for all 6 soums. At the Bulgan soum, indoor WASH facilities could not be installed for the school buildings because the estimated cost was 200,000 USD and there was insufficient budget available to support this.

Recommendation 1.2: Before funding a project component with construction activities, complete the preliminary design so that technical requirements are known and more accurate cost estimations and timeframes can be made.

Results Level: Limited joint programming

The JP executing agencies were effective in sharing experiences and communicating plans and progress, but there was limited joint programming integrated into the agreed implementation modality. Procurement and construction works were carried out separately, field coordination and supervision was separate, financial accounting and reporting was separate and monitoring

& evaluation was separate. There were comparative advantages realized through certain implementation modalities by individual agencies, but the general lack of joint programming seems to outweigh the benefits realized by operating in parallel.

- ✓ The kindergarten in Bayangobi soum received water supply from another donor, but does not have sanitation. UNDP provided drawings of a central system for all public buildings, UNICEF provided internal plumbing fixtures, but they cannot use without sanitation.
- ✓ No water supply for school building in 2 of the 6 soums. Decentralized water supply for these schools could have been realized with better collaboration between UNDP and UNICEF.
- ✓ WHO and UNICEF have jointly developed best practice (not part of this project) for protecting water supply springs, but UNDP managed this part of the project, without much consultation with these agencies, and the delivered protected spring systems do not meet international best practice.

Recommendation 1.3: For similar interventions, joint procurement, construction, coordination, and supervision should be considered for complementary activities among JP partners, such as water and sanitation, in order to improve both efficiency and effectiveness.

Design and Process Levels: Field coordination was inconsistent and not coordinated among executing agencies

There was evidence during the terminal evaluation mission that more consistent field coordination might have improved project effectiveness. For example, the observation of livestock inside the protected spring boundaries indicates a general lack of awareness among the local herders in terms of water quality and/or reliability issues. I think that WHO would have helped UNDP with some health based impacts, etc. Also, the quality of constructed internal WASH facilities at the Bayangobi soum was found to be rather poor. Travel distances and times between Ulaanbaatar and the targeted soums are considerable, and the project implementation staff had difficulties efficiently coordinating and supervising the activities. Furthermore, each of the executing agencies organized their own field level coordination and supervision.

Recommendation 1.4: For similar projects, engage project-level field coordinators and/or social mobilizers to improve the lines of communication between the implementation staff in Ulaanbaatar and the field, and also more frequently communicate with the soum centre authorities and other local targeted stakeholders.

Design Level: Integrated water resources management was not promoted

Water resources are scarce at the targeted soums, and water resource management was observed to be a bit arbitrary, i.e., there is generally a lack of water supply management and water demand management. For example, at the Bulgan soum, there was no available water balance for the spring supplying both community and agricultural water needs. Farmers were observed using relatively large quantities of water, without balancing the demands of the community, e.g., the school remains without water supply. The UNDP has a great deal of experience with integrated water resources management (IWRM), and promotion of IWRM among one or more of the targeted soums could have been a useful demonstration model for

relevant government officials, and might have eventually led to good practice replication in other parts of the country.

Recommendation 1.5: Be sure to leverage the existing IWRM expertise of the UNDP in these water supply development/management projects.

Recommendation 1.6: Consider assigning operation and maintenance of the commissioned infrastructure to a single community level organization, e.g., the public utility service organizations (PUSOs).

Design Level: Insufficient focus on climate change adaptation during water supply planning

The target soums are highly vulnerable to climate change impacts, but very little emphasis was placed on climate change adaptation in the water supply planning efforts made. For example, it would have been useful to build capacity at the local level to monitor groundwater level changes, so that water resources management can be integrated with supply constraints, and also contribute to the climate change knowledge base in the country. The human security dimension in the target soums is directly affected by water scarcity, and due to predicted climate change effects, water supplies will become even more limited. Our comment is directed toward the design, i.e., climate change adaptation approaches, including IWRM, monitoring, etc., should have been better integrated into the project formulation

Recommendation 1.7. Budget should be allocated to help communities manage their water supplies, implement water demand management measures, and also contribute to climate change knowledge, for example, by providing groundwater level data-loggers or simple water level meters for the constructed water wells.

Process Level: Water quality of drinking water resources was insufficiently characterized

The water quality of the constructed and/or rehabilitated water supply wells and springs was not sufficiently characterized to ensure that drinking water guidelines are fulfilled. Evidence was provided to the terminal evaluator, showing that some water samples were tested for general water quality parameters, including fluoride and, in some cases, arsenic. For the drinking water supply wells supported by UNICEF, the contractors arranged testing for the following parameters: hardness, calcium, magnesium, chloride, iron, nitrite, nitrate, mercury, pH, and color/taste/odor. This information is documented on the well passports. However, the water supplies were not tested for naturally occurring constituents that are of health significance, including arsenic, barium, boron, chromium, fluoride, and selenium (WHO Drinking Water Quality Guidelines, 4th edition, 2009). Uranium is also included among this list, but there is reportedly limited laboratory capacity in the country for analysing this parameter. These parameters should, at a minimum, be tested to properly establish the suitability of the delivered water supplies.

Recommendation 1.8: Constructed and/or upgraded sources of water should be tested for minimum, health-based drinking water quality parameters, including arsenic, barium, boron, chromium, fluoride, and selenium, as well as reference microbial parameters (based on local conditions).

Process Level: Portable water quality laboratories provide limited value

The portable water quality laboratories (HORIBA U52 units, at 4,150 USD apiece) provide limited value with respect to ensuring safe drinking water quality. The parameters tested are

general water quality constituents, including pH, oxidation-reduction potential, dissolved oxygen, salinity, total dissolved solids, temperature, and turbidity. Once the water quality of a groundwater supply is characterized, there is generally no significant change in the concentrations of these general water quality parameters unless the supply is under pollution stress or other pressure. Although parameters analysed by the testing equipment can give an indication of the acceptability of drinking water, constituents of health significance are not analysed. The results provided by these portable laboratories could, thus, give a false sense of security to the beneficiary users. Also, based upon working experience, required calibration and maintenance are often neglected for such portable equipment.

Recommendation 1.9: As most water-borne illness is caused by microbiological parameters, emphasis should be placed on developing and implement regular disinfection of water supply networks, and regular testing by independent laboratories for relevant microbiological parameters.

Design and Results Level: Hygienic protection of water supply springs do not fulfil purpose

During the field mission, one of the protected water supply springs and one protected springs were visited. At both locations visited, the gate to the fence was either open (Bulgan) or missing (Bayangobi), and livestock faeces were observed right at the spring source at the location near Bayangobi. Furthermore, the evaluation team was informed that the remote spring near Bayangobi is used by many of the villagers for drinking purposes, as the people believe the water has healthful properties. Signage was lacking at both sites; for example, no signs indicating that livestock is prohibited inside and why.. While the spring at the Bulgan soum had a spring box that was rehabilitated, spring boxes were not constructed at the other areas. International good practice guidelines (e.g., see **Exhibit 4**) call for spring boxes, to protection the hygienic integrity of springs. Insufficient funding and a binding procedure approved by the authorities were cited as the reasons for not installing spring boxes. Marginal costs for providing spring boxes are minimal, and the evaluation team considers it unacceptable not following international good practice.

Protected spring. The spring is typically protected from runoff, bird droppings and animals by a "spring box", which is constructed of brick, masonry, or concrete and is built around the spring so that water flows directly out of the box into a pipe or cistern, without being exposed to outside pollution.

Source: WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation (www.wssinfo.org)

Exhibit 4: Definition of Protected Spring

The fact that operation and maintenance of these protected springs could not be ensured during the lifespan of the JP, concerns are raised regarding the sustainability of these improved systems.

Recommendation 1.10: In the opinion of the terminal evaluator, spring boxes should be installed at each of the protected springs, per international good practice. As indicated earlier, technical requirements should have been identified at the project development stage, so that appropriate costs would have been allocated. From a stakeholder participation perspective, more effective consultation, e.g., through social mobilizers, could have been made with local herders, better explaining the design plans and adapting the plans to accommodate their traditional ways of life.

Design Level: Life safety was not considered in water supply planning

Life safety, particularly fire protection provisions, for certain public buildings, such as schools, dormitories, and hospitals in the targeted communities were observed to be insufficient. In the opinion of the terminal evaluator, life safety provisions should have been made in conjunction with planning and construction of water supply and sanitation facilities for these buildings. Life safety systems are associated with water supply (e.g., fire water tanks, pipes, etc.), so it would make more sense to integrate that with the water supply design. Schools and hospitals should have life safety systems that fulfil minimum standards.

Recommendation 1.11: Especially for schools and hospitals, determine the fire-flow demand and make sure that information is part of the water supply management plan and delivered capacity of any water system constructed.

Other water-sanitation shortcomings identified:

The short construction season in Mongolia, contractor capacity and availability, and other circumstances affecting construction works were not fully considered during project design.

Recommendation 1.12: Incorporate on-the-ground reality into project timelines, and double construction time estimates for contingency.

Spare pumps were not provided for the commissioned groundwater wells. Response time for repairs is a significant constraining factor.

Recommendation 1.13: Allocate budget for spare pumps for the drinking water wells.

Water supply kiosks should have had integrated heating and will likely freeze up during winter. For example, in Bulgan soum, the local stakeholders indicated that there were freezing problems with the old water supply system.

Recommendation 1.14: Heating should be integrated into water supply kiosks

Collected revenue is unlikely to cover operating costs for centralized water supply systems, e.g., at Bulgan soum. Revenue shortfall is partly due to extremely low consumption rates.

Recommendation 1.15: Local governments need to understand that subsidizing water supplies will likely be required for a number of years. There is a public health justification for water subsidies, i.e., clean water, better hygiene, lower health care burden, etc.

Disinfection of septage from septic tanks at the health care facilities requires procedures, training, improved awareness.

Recommendation 1.16: Procedures should be prepared and training delivered for safe handling of health care septage.

Results Level: Waste management interventions were implemented with limited planning

The waste management interventions delivered to the soums were not part of the project document. The project coordinator informed us that the local community and authorities requested the recycling solid waste activity and proposed implementation at the soum level as an initial stage for solid waste management improvement.

A few persons involved in the waste recycling operations were contacted by telephone, and they were a bit dissatisfied with the delivered equipment: in one case, the operator indicated

that the equipment was too small, and the other indicated that the fumes from the melting operation were unpleasant (and probably harmful to their health). To be fair, due to limited budget, the project was unable to provide the required training for efficient operation of the delivered equipment, and the local beneficiaries seem to generally have demonstrated low ownership for the activities.

Recommendation 1.17: Solid waste management in the target soums should be evaluated from a community-wide perspective. The first step should be preparation of waste management plans.

4.2. Objective 2: Education

Objective 2: To improve the quality of formal education through providing rights-based child-friendly schools that are inclusive, gender-sensitive, healthy, safe for and protective of children, involving their families and communities (UNICEF).

LOGICAL RESULTS FRAMEWORK:

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
Output 2.1: All the six target schools will be developed as model child-friendly schools in their soums	<ul style="list-style-type: none"> # of workshops/trainings conducted for school staff on CFS features # of trainings conducted for students on proper hygiene and environmental issues # of school child-led organizations newly established # of schools that develop and use a school development plan which includes CFS features 	Rather than verifying this output with numbers of trainings held, numbers of organizations established, and number of schools that use CFS features, it would have been more advisable to design indicators that provide feedback on the impact of implementing CFS principles.
Output 2.2: 80 percent of school children in the target areas will have access to improved water and sanitation facilities	<ul style="list-style-type: none"> # of WATSAN facilities built # of school children with access to improved water source and sanitation # of IEC materials developed of teachers, caregivers and students participated in training and % of people improved their knowledge on M&O and latrine construction # of families constructed households latrines 	This target fulfils SMART criteria, but it would have been advisable to included details on how knowledge retained was to be measured.
Output 2.3: 90 percent of school children in the target areas will practice proper behaviours focusing on environment protection and hygiene	<ul style="list-style-type: none"> # of children, caregivers and teachers trained % of participants improved their practices. # of PSA and of IEC materials developed 	Behavioural impacts are often difficult to measure, and more time would be required beyond the lifetime of the project.
Output 2.4: Data on environment will be integrated in the education M&E system and cost-analysis managed by the Ministry of Education, Culture and Science and Water Authority Agency	Quality of report delivered and regulatory framework developed by policy makers	This target is unclear, i.e., not sufficiently specific. For a 3-year project as this, the target should have been more focused and achievable within the framework of the project.

BASELINE:

- ✓ Child-friendly school methods were not used by schools in target soums.
- ✓ The schools in the 6 target soums lacked indoor WASH facilities and improved sanitation (e.g., ventilated pit latrines).

PROJECT STRENGTHS AND ACCOMPLISHMENTS:

- ✓ All the six schools in the target soums now develop and implement a school improvement plan based on the findings of the school self-assessment completed at the beginning and end of each academic year.
- ✓ Child Development Centres (CDC) established in six soum schools and dormitories of the target provinces continue to function as a hub for promoting the activities of students' clubs, including health and hygiene promotion, and student-led organisations as well as other extra-curricular activities.
- ✓ During the reporting period, the constructions of indoor WASH facilities at five Soum School were completed. Construction of indoor WASH facilities for one school was cancelled due to insufficient fund (estimated cost was much higher than planned budget). About 3,000 schoolchildren from 5 schools will have access to improved indoor WASH facilities.
- ✓ Good hygiene behaviour training and education activities are being implemented in the 6 soums in partnership with Mongolian Red Cross Society (MRCS) mainly through the school health clubs. In partnership with World Wide Fund for Nature (WWF), in the two schools from Tugrug and Bayan-Uul soums, the programme on increasing knowledge and skills on sustainable use of water and WASH knowledge among eco clubs members was implemented through school level Eco Club members..
- ✓ Improved ventilated pit latrines constructed at each of the schools in the 6 target soums, in partnership with the Red Cross.

SHORTCOMINGS AND RECOMMENDATIONS:***Process Level: Limited metrics available***

There were no metrics available regarding how effective the children-friendly school programs have been in the target soums (or in other parts of the country). Also, Activity 2.2 states that 80% of school children in the target areas will have access to improved water and sanitation facilities. The reporting contains no information as to whether this objective was achieved or not.

Recommendation 2.1: Local teachers and school administrators were observed to be proactively engaged in carrying out impact assessments. Data from these assessments should be compiled and metrics prepared to allow more quantitative evaluation.

Process Level: Poor quality of constructed indoor WASH facilities observed in one school

During the evaluation mission to the school buildings at the Bayangobi soum, constructed indoor WASH facilities were observed to be faulty and of general poor quality, e.g., tiling was not uniform or finished properly, no separation provided between toilets, spacing between fixtures insufficient.

Recommendation 2.2: More thorough inspections should be made of constructed indoor WASH facilities. During the evaluation mission, the UNICEF representative indicated that their agency has already started implementing a procedure that requires a UNICEF staff member to inspect finished work before the contractor receives the final 10% of payment.

4.3. Objective 3: Primary Health Care

Objective 3: *To enhance the access and quality of people-centered primary health care (PHC) with gender-sensitive consideration, by reducing exclusion and integrating health into other multisectoral perspectives including climate change, gender and human rights (WHO and UNFPA).*

LOGICAL RESULTS FRAMEWORK:

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
Output 3.1: <i>An integrated PHC package is developed based on community needs living in all 6 selected soums to be clearly defined with full participation of the local governments, PHC teams and communities and utilized in planning, implementing and evaluating the people-centered services</i>	<i># of workshop conducted # of trained personnel to conduct needs assessment on PHC Protocol and questionnaire available for needs assessment on PHC</i>	This target mostly fulfils SMART criteria. The expected timeframe should have been indicated, and the term “full participation” should be more specific.
Output 3.2: <i>6 pilot soum health facilities improved for quality health services and with safe water, sanitation and health care waste disposal facilities in place as models for communities</i>	<i># of soum health facilities with improved water, sanitation and health care waste disposal</i>	The water and sanitation needs were not fully known at the time of project development; needs assessment made after implementation started. This target should have been adjusted after information was gathered on what specific interventions would be made.
Output 3.3: <i>80 percent of all populations in 6 soums , including infants, women of childbearing age, adolescents, elderly and minority groups, covered in a newly developed integrated essential package of key health interventions for PHC</i>	<i>Integrated PHC package available #of soum health care workers trained on integrated PHC package implementation % of communities covered with PHC services</i>	The target mostly fulfils SMART criteria. The expected timeframe should have been indicated.
Output 3.4: <i>Stakeholders participated in the workshops and training programmes on PHC planning & evaluation, gender mainstreaming & human rights issues, and information sharing, to strengthen coordination and integrate all efforts.</i>	<i># of stakeholders consultative meetings on PHC conducted per soum</i>	Participation in trainings and consultative meetings does not ensure transfer of knowledge and capacity. Mechanisms of measuring effectiveness and anticipated timeframes would have improved this target.
Output 3.5: <i>Increased knowledge, awareness and preparedness on the effects of climate change and health among communities, populations,</i>	<i># of health care workers, other sector staff and community leaders trained on how to deal with climate change and health issues</i>	This target is a bit unclear, with respect to how the effectiveness would be measured. As behaviour changes will likely take longer to

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
<i>health care workers and other related sectors in six target soums improved.</i>	<i>Soum specific climate change and health action plans developed Knowledge, attitude and behaviour of community on climate change and its effects improved</i>	achieve than the lifetime of the project, more information on expected timeframe should have been indicated.

BASELINE:

- ✓ Lack of primary health care capacity, and no integrated PHC service.
- ✓ Lack of knowledge about climate change and health among soum populations.
- ✓ Unsafe management of health care wastes.
- ✓ Increasing rates of illness and disease in target soums.
- ✓ Limited health care equipment and supplies.

PROJECT STRENGTHS AND ACCOMPLISHMENTS:

- ✓ Soum level health care managers and staff have effectively adopted the primary health care approaches promoted by the project.
- ✓ There has been successful outreach to the community at large, e.g., convincing many women to volunteer their time in helping to implement the maternal and child health and nutrition training activities.
- ✓ A total of 2000 people including children, adolescents, women, elderly and members of other minority groups were involved in these community-based interventions in the six soums.
- ✓ Monitoring data has been collected on child nursing including massage, nutrition, vitaminization and training.
- ✓ According to the on-the-job monitoring, skills and knowledge of the participated doctors increased by 20% after 1 month of the training.
- ✓ Practical training conducted for parents on child nursing, prevention from diarrheal diseases, rickets, and preparation of complementary food in Tugrug soum of Gobi-Altai aimag showed that parent's knowledge was increased by 52% at the end of the training.
- ✓ Cases of common childhood diseases including digestive and respiratory diseases were decreased comparing to beginning of the project. Cases of common childhood diseases decreased 73% from 2010-2012 in the soum of Bayankhongor.
- ✓ Types of complementary food for children under 3 years old have been increased up to 10 types compared to the beginning of the project. Nutrition and calories reached to standard of physiological norm of children.
- ✓ There were 14 children who had a low weight in Bayangobi soum at the beginning of the project in 2012. 13 out of 14 children weight reached at normal level through project activities. Now one child who has still a low weight is being continued to be involved in child nursing activities at the soum health centre.
- ✓ Provision of equipment and training on safe management of health care wastes, in each of the 6 target soums. Based upon experiences in target soums as part of the JP and the

nation-wide efforts of WHO, Umnugobi aimag mobilized a fund and expanded this activity to health facilities in 7 other soums; positive evidence of replication and adoption of good practice.

- ✓ Facility monitoring revealed that water and sanitation facilities and techniques supplied for sound health care waste management are fully functional at 6 soum health centres.
- ✓ Strong evidence of community-empowerment, through primary health care training delivered in each of the 6 target soums. Approximately 40% of all health workers in the 6 target soums are now using PHC guidelines in their everyday practice.
- ✓ UNFPA improved technical capacity to provide primary health services to hospitals in each of the 6 target soums by providing the hospitals with 40 types of necessary PHC equipment.
- ✓ The WHO supported development of water safety plans in each of the six target soums through capacity building trainings and field consultation. Local Water Safety Plan teams were established, with broad coverage of involvement by local stakeholders. The plan and programme covered activities/measures for preparedness and adaptation on climate change.

SHORTCOMINGS AND RECOMMENDATIONS:

Results Level: Limited resources for upkeep and replacement of health care equipment and supplies

While JP PHC interventions were inclusive, community-needs based, and had considerable impact; continued funding is the number one concern for the sustainability of these positive results. For example, at the Bayangobi soum, the hospital director indicated that the medical equipment and supplies provided by UNFPA accounts for 92% of the hospital needs, but admitted that it is difficult to receive additional funding from the Ministry of Health for increased operation and/or replacement costs. UNFPA has done a good job to assist in this problem, e.g., once UNFPA has procured equipment it turns it over to the government and/or concerned agencies, relinquishing them from maintenance cost of the equipment procured. But UNFPA realizes that it would be a waste of financial resources if the equipment failed for whatever reason, defect or lack of maintenance. For this reason UNFPA reserves 10% of the procurement value for spare parts or repairs. At the same time, UNFPA is advocating to the Ministry of Health and Health facilities for inclusion of sufficient budget for medical equipment maintenance and spare parts in their budgets.

Based upon interviews with soum hospital directors during the evaluation mission, soum hospitals have become outpatient focused. However, given a lack of outpatient reporting or its requisite infrastructure hospitals are still reimbursed by state funds based on their inpatient days served. This has resulted in under-funding of the soum hospitals.

Recommendation 3.1: Donor agencies should continue working with Ministry of Health officials, share experiences from other countries, and review financing decisions for soum level hospitals and investigate funding mechanisms that could result in higher quality and more sustainable delivery of community health care service.

Design Level: Monitoring and evaluation indicators should be better designed at project onset

There are both local and national level capacity and routines in place for monitoring and evaluating health care operations. The donor agencies provide considerable professional support to the government level counterparts on monitoring and evaluation best practices. The monitoring plan for this particular project was not specific enough, e.g., with respect to defining indicators, monitoring frequencies, reporting responsibilities, etc., to allow for sufficient evaluation of the impact of the delivered interventions. The response provided to the evaluation team regarding JP impacts were too general, e.g., indicating that *“In Mongolia, provision of the health care equipment is contributing to the improved service quality for maternal and new-born care, including emergency obstetric care, essential new-born care and cervical cancer. Especially in the rural areas, such support plays a critical role in improved accuracy of the diagnosis, early identification and detection of complications and other symptoms, and increased survival chances of pre-term babies. It also saves money and time of rural populations as they can receive quality care in their provinces, not necessarily need to go to the capital for quality care, and clients’ satisfaction towards the health services is increased.”*

The positive impacts outlined above are indeed noteworthy, but more quantitative statistics would allow for a more meaningful evaluation of the effectiveness and efficiency of donor funding.

Recommendation 3.2: Clear monitoring objectives, methods, and resources should be agreed upon before starting implementation of similar health care related projects.

Results Level: Local health care waste management not coordinated at the local level

The WHO provided both equipment and best practice training to local health care facility managers on how to safely disinfect and dispose health care wastes. The sterilized wastes, including sharps, are packaged into boxes and buried in a designated pit at the community waste dumps. The evaluation team observed one of these waste dumps, in Bulgan, and there was no control in place by local authorities. The best practice promoted by the project requires ownership of the local soum authorities, to ensure that the procedures are maintained. No evidence was available demonstrating that the local authorities assume responsibility of the disposed health care wastes.

Recommendation 3.3: Local soum governments should coordinate community waste disposal with the health care centres and other waste generators. There is a pressing need for improving overall community waste management at the soum levels, and UNDP and/or other donor agencies should consider providing support to the soum governments in conjunction with aimag governments, the MEGD, and other responsible government counterparts.

Results Level: Low Ownership and Limited Funding for Climate Change Preparedness Implementation

The WHO supported preparation of climate change preparedness plans, and some low-cost activities have been implemented, e.g., planting some trees. Based upon interviews with local and national level stakeholders during the evaluation mission, there is a low level of ownership for this activity, and funding implementation seems to be fully dependent upon donor input.

Recommendation 3.4: The JP executing partners, e.g., through the Project Steering Committee, should engage government stakeholders and assess how the preparedness plans can be linked to the country’s other efforts associated with climate change adaptation.

4.4. Objective 4: Livelihood Improvement and Security

Objective 4: *To provide the target communities with income generation opportunities through community-based organizations, in order to empower their economic security and sustain their livelihood (UNDP).*

In addition to the livelihood program under this project, there were two other recent national level projects coordinated by the UNDP. In December 2012, a final evaluation was made for the Alternative Livelihoods Project (ALP) and the Enterprise Mongolia Project Phase II (EMP-2). The evaluation presented herein of the activities completed under Objective 4 is based upon findings during the evaluation mission in September 2013 and the results of the December 2012 evaluation (ALP and EMP-2).

LOGICAL RESULTS FRAMEWORK:

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
Output 4.1: <i>Specific technical and organizational needs of up to the selected 18 selected existing business groups, such as cooperatives, producers' groups and/or community enterprises and organizations, are identified.</i>	<i># and types of needs for the project intervention identified and sorted.</i>	The needs assessment designed under this output was important in progressing with other interventions under this objective. The expected timeframe of completing the needs assessment should have been indicated.
Output 4.2: <i>All of the 18 selected existing business groups sustain their businesses in active operation with technical and organizational support from the project.</i>	<i># of the project supported business groups in active operation Average % of increase in the sales income of the business groups # of jobs with the business groups</i>	As this output demands upon the results of the needs assessment in Output 4.1, the target should have been re-evaluated after the assessment was completed.
Output 4.3: <i>At least 12 new business groups/community enterprises with 100 new job opportunities are established through vocational and entrepreneurship training for youth and unemployed community members in the target sites.</i>	<i># of the project supported business groups in active operation Average % of increase in the sales income of the business groups # of jobs with the business groups</i>	Same comment as indicated above for Output 4.2.
Output 4.4: <i>At least 50% of the business groups receive microfinance from formal financial institutions with the support/facilitation from the project.</i>	<i># of newly established business groups/community enterprises # of job opportunities newly created with the new groups/enterprises</i>	Helping the business groups with business planning might have been a more achievable target than setting a goal of securing financing.

BASELINE:

Developing and implementing poverty reduction strategies for rural/herder Mongolian population could not be more relevant especially in the face of climate changes. Adapting to change is three step process: (1) recognizing that change is needed, (2) considering and evaluating adaptive strategies, and (3) executing and implementing those adaptive strategies to finally achieve a more sustainable position.

As indicated in the ALP and EMP-2 evaluation (Dec 2012), *"The effects of climate change are already starting to negatively impact on these communities and the situation is likely to worsen in the future. During the last Dzud in 2009-2010 20% of the national herd was lost and around*

one third of herders lost at least half their livestock which meant that they were deprived of their major source of income”.

However, the adaptive strategy many rural Mongolians considered and implemented as the best available option has itself some problems, e.g.

“In the past dzuds have resulted in some herders abandoning nomadic (or rotational) pastoralism completely and many have migrated to urban areas in search of alternative livelihood opportunities. The result is often that they exchange one problem for another joining the slum dwellers of Ulaanbaatar, thereby exacerbating both their own personal problems as well as adding to the growing problem of the ‘Gher District’ of UB with limited access to electricity and no running water, sewage or central heating.” (ALP and EMP-2 evaluation, Dec 2012).

This project with its effort to train and expose new economic opportunities was clearly needed and relevant.

STRENGTHS AND HIGHLIGHTS:

- ✓ Beneficiaries were very well exposed to potential alternative livelihoods.
- ✓ Closed attitudes towards alternative livelihoods shifted to being more open and the vocational training provided tools to act on these new opportunities.
- ✓ The project was very “bottom-up”, in that the beneficiaries were engaged to determine what they felt were good possibilities, and then those identified possibilities were supported programmatically.
- ✓ The main alternative livelihoods developed made good economic sense (fodder production, vegetable production, and dairy processing) because they leveraged the available assets in human capital (built on a familiar base) and available natural resources.
- ✓ Market access and exposure was provided through supporting trade show participation. Seeing markets and buyers first hand was no-doubt an eye-opening experience and critical to changing the mind-set of beneficiaries.
- ✓ Through this experience project beneficiaries gained first-hand knowledge as to market demand, pricing, and the competition enabling them to better compete in the marketplace.

SHORTCOMINGS AND RECOMMENDATIONS

Results Level: Livelihood Interventions Successful but Need a More Business-Oriented Reporting Approach

Changing human behaviour is a complicated task dictated by traditions, individual and social psychologies, and available institutional support. Getting “buy-in” at all these levels is non-trivial and the degree to which it can be measured objectively is equally challenging. Baseline needs assessment were well done and clearly rooted within the targeted communities (Task 4.1). Proof of the quality and inclusive nature of the baseline assessments were in the resultant options produced. The options leveraged the available human and environmental capital, i.e., livestock fodder production as a feed supply hedge under *dzud* conditions, vegetable production, and dairy processing.

Further proof of the relevancy is that herders did change their behaviour and formed groups around these new economic activities identified and developed during the baseline phase. The herder groups were supported with training and market access activities. The benefits to the

target groups were well expressed, e.g., as indicated in the following excerpt from the ALP and EMP-2 evaluation (Dec 2012):

“Project participants interviewed clearly expressed their views concerning the benefits of group formation which included:

- *By pooling their labour and then dividing responsibilities among themselves between the various activities they were able to manage a number of enterprises concurrently, something that they would have been difficult if not impossible operating alone. One illustration was division among herder groups into those who took care of the collective group of members’ animals, leaving others to focus on other business activities such as growing vegetables.*
- *Their realisation that group formation is important to allow for sharing of their labour to deal with labour intensive activities like hay making, preparation of wool and cashmere during the spring time and winter preparation such as construction and maintenance of winter shelters for animals.”*

The challenge is that the JP project was designed to move beyond the formation of groups and into increased sales. The Objectively Verifiable Indicators (OVIs) under Activity 4.2 were:

- ✓ Average % of the increase in the sales income of the business groups
- ✓ # of jobs with business groups

These OVIs were unaddressed in the project progress reports. This is the formative reason for the entire objective, i.e., to provide more income and jobs, so it seems a significant that that these OVIs are not addressed.

It is our understanding that a proportional piling participatory instrument was utilized to assess income sources in the ALP and EMP-2. This instrument was used to assess the mix of income sources, not the absolute or changes in income due to project intervention. The income mix statistics were collected to indicate income diversification improvements, not necessarily changes in income. In the exact words of the ALP and EMP Evaluation Annex 5, “proportional piling participatory instrument was utilised in cooperation with household members to identify household income **sources** and assess the extent of diversification and the relative mix of incomes sources within the ‘household economy’.”

This metric, while important, does not address either of target metrics identified under Activity 4.2. This evaluation team reviewed the cluster/herder group interview notes included in Annex VI and found that out of the 15 Case Studies Key Interviews, which is presumably representative of the project beneficiaries, we could only find one case that provided quantitative income data before and after the project. The remaining 14 or 93% said that “Sales were good”, “customers expanded”, or “livelihoods improved”, but provided no quantitative data to objectively measure such statements. The full list of “sales related” comments are below.

It may be that the metrics developed for Activity 4.2 for the JP were not developed knowing the data collection approach of the ALP/EMP. There were clearly many satisfied beneficiaries positively impacted with 100% of the interviewees having some positive things to say about the program. However, the data collected did not inform the metrics established. We recommend in the future with concurrent or overlapping projects, that the metrics established in one project match the data collection efforts in the other.

Under Activity 4.2.2 (Support to herders to market their products), the 2013 JP progress report states that participants in the autumn trade fair “...not only sold their products, but also learned what specific demands were existing in relation to their product ...”. This is an excellent result but it needs to be quantified, as this is after all a business venture to improve income. Was the cost of attendance in trade fairs a good investment? Did the return from sales justify future participation? Not only is this extremely relevant to improving the livelihoods of the target population as it is net revenues, not just sales, that genuinely improves living conditions, it speaks to the sustainability of the effort.

The lack of accurate sales information was not just a symptom of this JP reporting, but also of the national ALP efforts, as indicated by the following excerpt from the ALP and EMP-2 evaluation (Dec 2012):

“In some groups participants contribute a certain percentage of their income from sales of produce, and this represents an informal ‘savings club’...”

But no actual sales data or estimates were mentioned to address the OVI under Activity 4.2.1. There is anecdotal evidence of sales from the national effort (Dec 2012):

“Female headed household Mrs. Baatar started her activity in 2000. This cluster began with the EMP in 2005. She employs 13 people in her bakery unit. She received two loans, the first in 2006 and the second in 2008. Her cluster produces five different types of products, namely bread of 0.9 kg and 1.8 kg in weight and numbering 700-800 per day, and noodles in 0.5 kg bags numbering 200 bags per day. Sales are buoyant.”

As positive as “Sales are buoyant” is for Mrs. Bataar and others who were undoubtedly similarly impacted from this JP and the ALP/EMP-2, donor funds being invested in improving livelihoods require verifiable proof that livelihoods are in fact being improved. Even the EMP-2, which is arguably more concerned with long term improvements of livelihoods as opposed to the shorter term natural disaster response mandate of the ALP, fails to provide any quantitative analysis of income improvement. As indicated in the ALP and EMP-2 evaluation (see **Exhibit 5** below), there were no data in the “% increase HH income” under EMP-2 in either the OVOPI or the LCDI “income improvement” initiatives for 2009-2012. Clearly more objective and quantitative sales/income/employment data needs to be gathered, addressed and reported to determine if interventions designed to increase income are effective.

	EMP-1			EMP-2			
OVOPI	2006	2007	2008	2009	2010	2011	2012*
Number of clusters supported	8	10	11	7	7	7	7
Number of HHS supported	178	278	288				
Number of direct beneficiaries	328	742	762	167	167	143	143
....of which women	246	477	481	95	95	89	89
% females	75%	64%	63%	57%	57%	62%	62%
Number of TA participants	100	622	362	-			
% Increase in HH cash income yr on yr	-	28%	33%	-			
Jobs generated (cumulative)	49	141	156	-			
Value of loans through the LGF (MNT million)	0	96	178		30	65	65
LCDI	2006	2007	2008	2009	2010	2011	2012*
Number of clusters supported	17	27	27	23	19	22	22
Number of direct beneficiaries	294	575	602	222	261	268	268
....of which women	183	376	343	166	191	198	198
% females	62%	65%	57%	75%	73%	74%	74%
Number of TA provided (cumulative)	53	99	116	-			
Number of TA participants	995	1,697	1,927	-			
% Increase in HH cash income yr on yr	n/a	47%	n/a	-			
Jobs generated (cumulative)	100	277	n/a	-			
Value of loans through the LGF (MNT million)	12	56	78	-	86	311	387

Exhibit 5: EMP Key Performance Information (Table 21 from ALP and EMP-2 evaluation, Dec 2012)

Recommendation 4.1: As a condition for programmatic support, beneficiaries should report baseline incomes over good years and dzud years. If income is unavailable, other indicators of well-being besides income should also be considered; for example, physical condition, calorie intake, child mortality, etc. Relevant indicators need to be found to establish baselines and allow evaluation of whether or not interventions such as these are actually improving income and economic security.

Recommendation 4.2: Business training for start-ups was provided by consultants for the project. Surely this would have included some form of accounting of income and/or changes in assets be them land, animals, structures owned. A consolidated statement with these data should be produced over the group or across groups of similar products, for the purpose of donor funding impact evaluation.

Results Level: More Professional Approach to Market Access and Sales Needed

This project did an excellent job at opening the minds of and exposing vulnerable herding populations to alternative livelihoods. The project also did an excellent job providing the tools to take advantage of those opportunities. However, certain business functions critical to the success of the program do not come naturally to new-to-business herders and may be better outsourced. It is difficult enough to convince a herder to switch mind sets to take on the challenges of fodder production or vegetable production. That is in no way a criticism addressed to the herders, who are producing marketable goods in a very difficult environment, but rather a realization that the sales function is often thought of as a necessary evil by producers – worldwide. Most agricultural and artisan cooperatives are formed so that the overhead of marketing and sales can be spread over many producers in the cooperative, who can then stay focused on production issues. But the sales function is not something to be taken lightly. Without a sustained and continuous sales effort of the products developed by the beneficiaries, the ALP will not succeed to improve income and increase economic security.

To be clear, this project did fund market access activities such as trade show participation at which *“not only products were sold, but some networks were established”* (JP 2013 progress report). However, this one-time intervention is not enough to provide sustained business for the producer groups.

This point is underscored in the National ALP and EMP-2 evaluation (Dec 2012):

- *“Market facilitation was weakest point of whole project. Except some wool product no products was exported.*
- *Facilitation and partnership building with existing local and national business service providers and matching the project beneficiaries to the potential buyers were executed at insufficient level.”*

Sales and marketing is just like irrigating crops, i.e., you have to do it regularly. A sustained sales/marketing presence in the market place with competitive products will achieve ALP objectives.

Recommendation 4.3: In future ALP projects, consider hiring a regional marketing representative in Ulaanbaatar to routinely and consistently follow up with buyers and provide periodic (monthly off season, weekly on season) sales/market reports to producer groups. This can be done through established product brokers or hiring directly a dedicated marketing representative. If the latter is chosen, design compensation for the marketing rep with a base salary and commission on sales. Work with the representative to determine the necessary

income from combined base and commission to stay focused on the producer's sales effort. If it is not enough, you will lose the interest of the marketing representative, if it is too much, then it could lead to taking of income from the vulnerable population the project is trying to assist. Also, part of the compensation should establish a base during *dzud* years so that the representative can survive too.

Establish a marketing/sales budget that will include operation costs (office, car, telephone, computer, etc.). Often marketing representatives work from home or out of their cars. Overhead should be kept to a minimum. In the case of hiring a sales service, marketing budgets must be delineated in detail. In some instances, marketing representatives also become distributors and arrange transportation. This provides additional income to the marketing representative and could be part of compensation negotiation.

Provide ICT solutions so that producers can see market trends and check pricing independently of marketing rep. Trust must be built between the producers and the marketing representative and independent verification of pricing/marketing trends provides a way to do that.

Provide financing for a minimum of 1-2 trade shows per year for a minimum of three years. This should not be funded for individual groups but for all the groups in a particular product category, at least in the beginning years. As producers grow their business, they can determine if they can afford their own booths at shows.

Results Level: Microfinance is a Necessity for Sustainability and Natural Disaster Insurance

One very clear indicator of the sustainability of any kind of business venture, social or otherwise, is the ability to find and attract financial capital. The very act of obtaining capital upfront to be paid back over time means that the new venture plans to be in business and sustain itself. Unfortunately, the JP progress reports do not provide information pertaining to Activity 4.4, which states that *"at least 50% of the business groups receive microfinance from formal financial institutions with the support/facilitation from the project"*.

The JP allocated 48,000 USD over the project life to prepare loan applications. It is unclear whether any loans were applied for and obtained, and whether or not those debts are being serviced or in default.

There are positive trends outlined in the ALP and EMP-2 evaluation (Dec 2012), e.g., that a Loan Guarantee Fund (LGF) established under the EMP-2 where 76 loans were provided and only one default recorded. Many of the ALP supported herder groups and cooperatives qualified for and were selected to obtain these loans to develop their enterprises. In Bayangobi soum 3 herder groups obtained soft loans of 5-10 million tugrug from the Soum Development Fund. Local selection committee members visited all herder groups before making decisions and herder groups and cooperatives who collaborated with ALP obtained high scores that qualified them for loans. It is unclear if any of the ALP beneficiaries under the JP participated in the LGF as Activity 4.4 was not addressed. It was pointed out in the ALP and EMP-2 evaluation that for those with zero collateral, even with the LGF, have a difficult time qualifying for loans. Simply put, commercial banks do not change their spots and, even with the LGF, remain conservative. This conservative position means that they are not interested in uncollateralized lending and most likely precluding the most vulnerable of populations, i.e., those with zero collateral.

Starting a business and keeping it going in a sustainable matter, especially starting with essentially nothing and in the face of periodic cataclysmic natural disasters requires access to

capital. The focus needs to be in engaging or establishing microfinance alternatives for low or zero collateral beneficiaries for the project to be more sustainable in the long run.

One interviewee in the ALP/EMP evaluation, Mr. Altangerel, former head of Administration Department, SME Agency, Ministry of Food, Agriculture and Light Industry stated:

"If the project included the SME as whole and extended its scope through activities such as loan, loan guarantee, leasing, it would have had significant contribution to the economy". (ALP/EMP Final Evaluation Annex VI)

Recommendation 4.4: More microfinance options are clearly needed for the most vulnerable groups. The EMP has shown that by mixing higher income with lower income members, some herder groups can get loans because they can be collateralized sufficiently for commercial banks in the LGF program. However, that is of little comfort for the zero/low collateral herder groups who are the most vulnerable beneficiaries. The next ALP project needs to follow through on the micro-financing component (Activity 4.4) because without access to capital, these business development interventions evaporate when donor funding stops. Access to capital also acts as a hedge against natural disaster, i.e., it provides a financial bridge from onset of the natural disaster to the recovery. The practicality of setting up micro-financing is good because even though zero/low collateral groups are perceived as "high risk" from a commercial banking perspective, from a micro-finance experience, these groups have extremely low default rates. And finally, the reporting requirements for micro-financing will help not only the herder groups manage their alternative livelihoods better, they will be able to provide the quantitative data necessary to provide on-going monitoring and attract future social investors.

Process Level: A Minor Discrepancy under Activity 4.2.1

In the JP budget (from the 2010 project document), Activity 4.2.1 includes "training and consulting services on business development/management":

From the JP budget, Activity 4.2.1:

Subtotal 4.1		8,400	0	0	8,400
4.2 All of the 18 selected existing business groups sustain their businesses in active operation with technical and organizational support from the project.	4.2.1 Training and consultancy services on business development/management	17,000	28,000	28,000	73,000
	a. Training on business management and development skills including cost-accounting and business record management (USD50/participant x 200 for the 1st year and 300 for the 2nd and 3rd years)	10,000	15,000	15,000	40,000

Progress under for Activity 4.2.1 in the JP 2013 annual progress report, indicates "provision of equipment to the herder groups":

From the JP 2013 Annual Progress:

Activities		
4.2.1 Provision of equipment to the herder groups	# of workshop conducted # of participants # of trained personnel	ALP provided small scale irrigation scheme to 5 groups as a result of which the groups managed to expand their vegetable and fodder production.

In the JP budget there is no mention of equipment purchases under Objective 4. It is unclear what happened that causes the discrepancy between project budget and project reporting. In terms of impact, it seems the purchasing of this equipment did provide a positive influence,

but again without any quantitative data on increased production, production costs, and revenues, it is not possible to evaluate the impact of such an action. The fact that production “increased” is simply not enough to allow meaningful evaluation.

Recommendation 4.5: Program managers should provide more documented support for reasons behind changes in scope.

4.5. Objective 5: Public Outreach and Dissemination

Objective 5: To share the lessons-learnt from this pilot initiative using the human security approach to wider audience of both national and regional stakeholders in Mongolia (UNCT Joint Initiative: UNDP (lead), UNICEF, WHO, and UNFPA).

LOGICAL RESULTS FRAMEWORK:

Outputs (Targets)	Objectively Verifiable Indicators	Terminal Evaluation Comments
Output 5.1: The concept of human security is widely understood to both central/local governments and community populations while implementing the pilot initiative	# of forums organized	The term “widely understood” is not sufficiently specific, and also difficult to measure.
Output 5.2: Discussion over the importance of concept and its successful implementation in the fields is widely recognized through public forum and other events	# of forums organized # of participants understanding HS concept	This target is also difficult to measure and achieving wide recognition does not appear to be a realistic goal within the timeframe of the project.

BASELINE:

- ✓ The concept of human security is not well known by local and national stakeholders.

PROJECT ACCOMPLISHMENTS:

- ✓ The UNFPA was identified as the focal point agency responsible for dissemination of human security concept with knowledge on climate change. UNFPA conducted training on human security concepts to the local communities at each of the 6 target soums and associated 3 aimags.
- ✓ A total of 120 community members participated in experience sharing workshops organized in each of the 6 soums.
- ✓ The book Human Security Now was translated to Mongolian and disseminated.

SHORTCOMINGS AND RECOMMENDATIONS:

Design and Results Level: Low level of understanding of human security concept observed

Awareness of human security concepts was found to be generally low among interviewed stakeholders, including government agency officials and soum governors, teachers, and health care directors. Explaining human security concepts is not easy, as it is not a commonly discussed issue.

Recommendation 5.1: More effort should have been made at the project development stage mapping out the HS impacts, etc., and designing the project around those results. During

project implementation, this framework could have been regularly monitored and, thus, used as a monitoring & evaluation tool. This would have provided the executing agency staff more project-relevant information that would have aided in their outreach activities. As a recommendation for similar interventions, public outreach at the local level could be enhanced through the engagement of social mobilizers, and these efforts should be incorporated as part of project coordination, not only as a separate line item.

Design Level: Design of activities did not focus on sustainability of the efforts

Dissemination of human security information was assigned to one of the executing agencies, in this case the UNFPA. There was no evidence available (e.g., through impact assessment, knowledge retention, etc.) showing the effectiveness of HS training for local community member trainers.

Recommendation 5.2: For similar interventions, consider training local teachers to deliver the human security training. Involving the Ministry of Education through facilitation of UNICEF, might also result in enhanced sustainability of the knowledge transfer; e.g., by incorporating some of the training materials into school curriculum.

Results Level: Difficult for local stakeholders to associate translated documentation to their circumstances

In addition (or instead of) translating the book Human Security Now into Mongolian, it might have been more effective to prepare 1-page fact sheets for each soum.

Recommendation 5.3: Prepare specific fact-sheets for each soum, spot-lighting the successes of the project and how these efforts improve human security in the communities, for example, improved health care, better access to water and sanitation, child-centred educational methods, and alternative livelihoods.

5. PROGRAMME MANAGEMENT AND COORDINATION

Results Level: Limited joint programming

The JP executing agencies were effective in sharing experiences and communicating plans and progress, but there was limited joint programming. Procurement and construction works were carried out separately, field coordination and supervision was separate, financial accounting and reporting was separate and monitoring & evaluation was separate. There were comparative advantages realized through certain implementation modalities by individual agencies, but the shortcomings resulting from the general lack of joint programming seemed to outweigh the benefits realized by operating in parallel. For example:

- ✓ The kindergarten in Bayangobi received water supply from another donor, but does not have sanitation septic tank or other means of sanitary wastewater treatment. UNDP provided drawings of a central system for all public buildings, UNICEF provided internal plumbing fixtures, but they cannot use without facilities for sanitary wastewater treatment.
- ✓ Waste management. WHO provided each hospital with waste sterilization equipment (autoclave), and UNDP provided waste recycling equipment to some households and waste segregation facilities and training to public building users. If these agencies collaborated on these waste management efforts, the overall effectiveness and efficiencies would have been better.

- ✓ At the end of the project, there is no water supply for school buildings in 2 of the 6 target soums. No evidence was found that early warnings were raised to the Steering Committee to evaluate possibilities of re-allocating JP resources to that these vulnerable groups could be provided with water supply.
- ✓ Protected springs. WHO and UNICEF have jointly developed best practices (not part of this project), but UNDP managed this part of the project, without much consultation with these agencies, and the resulting solutions for protecting springs do not fulfil international best practice.

In the opinion of the evaluation team, the inefficiencies of joint programming were mostly associated with how the programme was designed. For effective joint operation, financial accounting and reporting should be jointly made, field works should be jointly coordinated, procurement of complementary activities (e.g., all water and sanitation works) should be done jointly, and one person should be assigned to be responsible for monitoring and evaluation of all activities among the executing agency partners. If there is joint financial accounting, then funds could be directed by the JP coordinating agency (and probably some type of internal agreement between agencies). Most of the water-sanitation works made could have been tendered by soum as a whole, e.g., for wells, pipes, sinks, toilets, septic tanks, etc. Also, UNDP, UNICEF, and WHO staff were traveling to the same soums to supervise/coordinate the works. Also, each agency was doing own M&E, with limited JP-level reporting and weak coordination.

Design Level: Comparative advantage of executing agencies should be considered for intervention management

Certain interventions would best be managed by individual executing agencies that have comparative advantages in doing so. For example, projects that would benefit from joint cooperation are ones where infrastructure is being provided across objectives. The construction of water, sanitation, and waste management should be managed by the JP regardless if it is to hospitals, schools, or residences, i.e., across objectives. However, those interventions that are related to the specialty of the agency, that specialist agency should take the lead. Some examples of effective implementation modalities were the child-friendly school methods facilitated by UNICEF in collaboration with the Ministry of Education, and the primary health care activities completed by the WHO and UNFPA under the auspices of the Ministry of Health. For the water and sanitation interventions, effectiveness might have been higher if these were jointly managed, not in parallel.

Design Level: Government level coordination was not well defined

At the thematic level, the executing agencies did a very good job in collaborating, mostly individually, with their counterpart government agency. The fact that there is no single government agency responsible for rural development made it difficult to identify a single coordination counterpart. The Ministry of Environment and Green Development (MEGD), specifically the National Water Agency, was the main government level coordination counterpart, collaborating directly with the JP coordinating agency, the UNDP. And, there was a JP Committee assigned with coordination oversight. The committee met 3 times over the 3-1/2 years of project implantation. The first two meetings had 54% and 64% attendance, respectively, while the last meeting held in January 2013 had 90% participation. At the first meeting, held in September 2010, there were no representatives from the Ministry of Health or

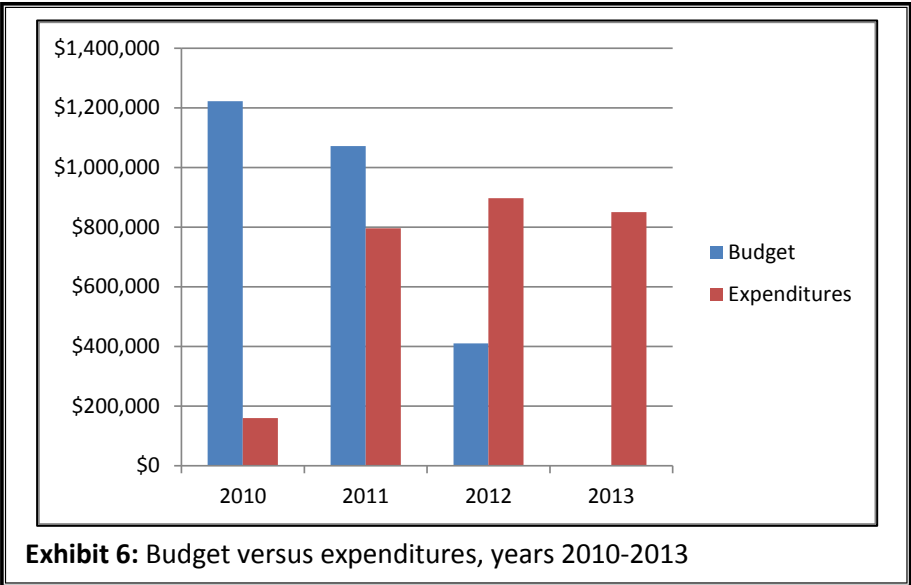
the Ministry of Education, which were important government level stakeholders in the project. Lack of participation in coordinating meetings by Ministries suggests lack of commitment and/or information flowing from the GoM to the thematic counterparts for the UN executing agencies.

Design and Process Level: Field coordination was inconsistent and not coordinated among executing agencies

There was evidence during the terminal evaluation mission that more consistent field coordination might have improved project effectiveness. For example, the observation of livestock inside the protected spring boundaries indicates a general lack of consultation among the local herders with respect to their traditional habits and water quality concerns. Also, the quality of constructed internal WASH facilities at the Bayangobi soum was found to be rather poor. Travel distances and times between Ulaanbaatar and the targeted soums are considerable, and the project implementation staff had difficulties efficiently coordinating and supervising the activities. Furthermore, each of the executing agencies organized their own field level coordination and supervision. Engaging project-level field coordinators and/or social mobilizers could have improved the lines of communication between the implementation staff in Ulaanbaatar and the field, and also more frequently communicate with the soum centre authorities and other local targeted stakeholders.

Process Level: Financial accounting and reporting was not uniform among the executing agencies

On average, financial delivery rates were approximately 75% during the 3 years of project implementation. As outlined under the discussion in Section 4.1 (Objective 1 findings), the low delivery rates were largely due to grossly under-estimated construction costs and timeframes. This is evident in comparing the budget costs against time with the actual expenditures (see Exhibit 6).



Procurement took longer than envisioned in the project document, and much less water supply infrastructure construction was completed than planned because of insufficient funds.

The evaluation team requested financial expenditure reports broken down by activity, in the same format as the budget was formulated. This information was not provided within the

timeframe of the terminal evaluation. Activity breakdowns were also requested by the UNCT Committee in the 18 October 2012 meeting. Separate financial reports were issued by each of the executing agencies, and all in different formats. With these differing reporting formats and limited linkage to the budget presented in the project document, evaluation of financial management is difficult. For example:

- ✓ There are no separate line items for monitoring & evaluation, to check if sufficient resources were expended on these activities, and at least whether the M&E implementation was consistent with the plan.
- ✓ Project management costs are difficult to distinguish between overhead-administration with programme support by PIU and agency staff.

For this joint programme to have more efficiently delivered the planned interventions, joint accounting and reporting would certainly have helped in controlling how money is spent and allowing more timely communication to programme managers.

Design Level: Insufficient resources budgeted and expended for monitoring & evaluation

There were resources budgeted for monitoring & evaluation (M&E), but the budgeted activities were not related to M&E in all cases, some planned M&E activities were not carried out, and there was limited evidence of whether and how the money was spent. For example:

- ✓ A mid-term evaluation was planned, but in September 2012 a decision was made not to carry out a mid-term evaluation (it was late by then), and rather hold a best practices workshop (which is not an M&E activity).
- ✓ Some of the line items in the budget indicated as “monitoring” were more related to supervision of construction works, e.g., the costs under Activity 2.4.2 (Monitoring & Programme Implementation)
- ✓ In the JP budget, there were 30,000 USD allocated for Activity 3.3 (UNFPA) for a monitoring and reporting expert, but it is unclear how these funds were utilized as there was no separate line item for M&E in the UNFPA financial expenditure reports provided.

The M&E plan in the project document is very general, e.g., there are no specific metrics indicated, frequency and method of monitoring, analysis of monitoring data, and reporting frequency.

Recommendation: All of the donor and implementing agencies in this project have extensive M&E experience. Benchmarks of many of the activities engaged in during the JP are most likely available for internal audits, and should be made available to the project as goals, and compared to project results during the mid-term and final evaluation.

6. HUMAN SECURITY IMPACT ASSESSMENT

A human security impact assessment aims to look beyond evaluation of project performance against indicators, by focusing on why the programme was developed and implemented in the first place. A condensed assessment was made to evaluate potential positive and negative outcomes associated with the project interventions.

Human Security Component	Project Intervention	Impact Evaluation	Possible externalities on other insecurity domains	
			Positive potential outcomes	Negative potential outcomes
Health Security	Providing decentralized water supply for schools and hospitals, and providing internal WASH facilities	Noteworthy impacts realized through decentralized water supply. However, some schools and hospitals in target soums remain without water supply at the end of the project.	Protection of vulnerable groups in communities (community security)	Potential perception of replacement of State's role in providing water supply (political insecurity) Potential inefficient resource use as a result of the lack of water resources management planning (environmental insecurity)
Health Security	Protecting hygienic conditions of water supply springs and wells	Limited impacts expected. Spring protection methods do not meet international good practice guidelines, and local awareness is low.	Improved protection of water supply sources could lead to improved resource management (environmental security)	Lack of acceptance by local herders of altering their traditional habits (community insecurity)
Health Security	Rehabilitating water supply infrastructure for community needs	Noteworthy impacts at the target soums where water supply infrastructure improvements were realized. However, for some of the target soums, project output was limited to preparation of design drawings, which do not address the short to medium term needs of the relevant vulnerable groups.	Reduction of losses, thus improved conservation of scarce water resources (environmental security) Increased amount of food grown locally (food security). Enhanced livelihood opportunities (economic security)	Potential inefficient resource use as a result of the lack of water resources management planning (environmental insecurity) Potential conflicts from imbalances in water resource management (community insecurity). Possible unaffordable access to water supply (economic insecurity)
Health Security	Improving primary health care practices, and providing essential health care supplies equipment	Implemented in each of the 6 target soums. Strong ownership observed, but limited resources available for sustaining supplies and equipment.	Enhanced protection of human rights (personal security)	Limited resources for upkeep and replacement of health care equipment and supplies (economic insecurity)
Health Security	Improving management of health care wastes	Implemented in each of the 6 soums. Methods are safer than former handling practices. Final disposal issues still need to be better coordinated.	Lower risk of environmental impacts of improperly managed wastes (environmental security)	Sterilized waste, including sharps disposed at unsecured community waste deposits (community insecurity)
Health Security	Promoting growing vegetables for health care centres	Implemented in each of the 6 soums. Clear evidence of positive impact to health security.	Lower dependency on non-local food supplies (food security)	N/A
Health Security	Sponsoring training on maternal and	Implemented in each of the 6 target soums. Effective	Improving balance in mortality/fertility rates	N/A

Human Security Component	Project Intervention	Impact Evaluation	Possible externalities on other insecurity domains	
			Positive potential outcomes	Negative potential outcomes
	child health and nutrition	outreach realized.	(community security, and gender security)	
Health Security	Fostering climate change preparedness to reduce potential adverse health impacts	Implemented in each of the 6 target soums. Efforts provide some basic awareness support.	Promotion of sound environmental management practices (environmental security)	Limited resources to finance implementation of climate change preparedness plans (economic insecurity)
Personal Security or Community Security	Introducing child friendly school concepts and establishing child development centres	Implemented in each of the 6 target soums. Proven concepts well received locally, with proactive local monitoring & evaluation.	Better education can lead to increased employment opportunities (economic security)	As local students become better educated, risk of migration out of soum centres might increase (community insecurity, and gender insecurity)
Personal security or Community Security	Providing improved sanitation at schools and hospitals	Noteworthy impacts to be realized by providing improved sanitation facilities. For some of the buildings where water supply was also provided, connection to old septic tanks was made with limited functionality assessment.	Reduced environmental impacts by replacing older sanitation facilities (environmental security) Lower risk of possible contamination of locally grown food (food security)	Potential adverse health impacts from mismanagement of infectious waste residuals (health insecurity) Potential perception of replacement of state's role in providing sanitation (political insecurity)
Environmental Security	Promoting sound waste management practices	Limited impacts observed regarding promotion of waste segregation and recycling. More significant impacts could have been achieved if focus was placed on community-level waste management needs, rather than select public buildings and households.	Community involvement in waste management could lead to increased employment opportunities (economic security)	Potential public health impacts from improper waste disposal (health insecurity) Potential adverse health impacts from exposure during plastics melting activities (health insecurity)
Economic Security	Providing alternative livelihood opportunities	Trainings, marketing sponsorship, and equipment purchases had measurable positive impact to the targeted groups and households.	Increased purchasing power, e.g., enhanced affordability of more healthful food (health security)	Trained skilled people might migrate to Aimag centres or UB for better economic opportunities (community insecurity, and gender insecurity)
Community Security	Transferring operation and maintenance of new or rehabilitated water and sanitation systems to public utility service organizations (PUSOs)	Good idea to use PUSOs to take over operation of new and rehabilitated water and sanitation systems. Collected revenue might be too low to ensure self-sufficiency.	Increased employment opportunities for local people (economic security)	Revenue might be insufficient to cover operation and maintenance costs (economic insecurity)

The human security scenarios presented above provide a map of potential positive and negative outcomes, and was used to help formulate our recommendations in Section 8. Such a decision tool could be used throughout the implementation period of such a project, to aid in monitoring & evaluation efforts, and also to direct implementation activities and priorities.

7. CONCLUSIONS

7.1. Relevance

The interventions carried out as part of the JP significantly contributed to solving the socio-economic needs that were identified in the design phase. For example, access to water supply was increased in the target soums, albeit not to the extent envisioned, but there were also advances made to the planning of centralized water and sanitation infrastructure in the soums that will facilitate further development. Child friendly school methods were established in schools in each of the six target soums, and through assessment made by local teachers, the benefits of more engaged students sets a solid framework toward measurement improvements in education quality and outreach. Local primary health care was also significantly enhanced through the activities of the JP, both in terms of intensive training and also through provision of supplies and equipment.

There were commonalities in the development goals among the five JP objectives, but the design and implementation were mostly made in parallel, not jointly. The human security needs in the target communities are cross-cutting among the different mandates of the executing agencies, for example; public health and water-sanitation; education and job security; water-sanitation and education, so a joint programme does seem to be both sensible and practical. Synergies and complementary opportunities were not sufficiently utilized, however. For example, joint procurement of the water-sanitation interventions administered by UNDP, UNICEF, WHO, might have improved both effectiveness and efficiency.

The executing agencies had working group meetings to discuss plans and progress, but there was limited evidence of a joint monitoring & evaluation strategy. There were missed opportunities that likely would have been identified if monitoring was more proactive. For example, school buildings in 2 of the 6 soums do not have water supply at the end project. In these soums, UNDP produced detailed design drawings for centralized water-sanitation infrastructure for public buildings, including schools, but the work will made at an unspecified time, upon approval of soum development financing by the central government. Short-term water supply solutions for the school buildings could have possibly been implemented within the project timeframe, if there was better communication among the executing agencies. Also, waste management activities could have been more effective with collaboration between the UNDP efforts related to identifying alternative livelihoods in the communities with the WHO, who implemented improved health care waste management in each of the six soums.

People-centred and gender responsive approaches were incorporated into the design of the JP. The designed interventions, including access to water supply, improved education and primary health care, and enhanced job security, were each very much people-centred, and there were cross-cutting gender-responsive approaches in the public health and job security activities. The socio-economic situation within the target soums did not significantly change from the time design phase to when implementation was carried. But, there were a number of changes made to the position of public officials, both centrally and locally, after implementation started, and this adversely impacted the institutional memory of the JP and required considerable efforts in updating these people.

7.2. Efficiency

The JP management model was more or less parallel implementation. This arrangement decreased efficiency, e.g., overlap in coordination, lack of joint procurement and financial accounting. But, the different implementation modalities might have led to higher rates of ownership and sustainability. For example, the WHO prepared design specifications for improved water supply access but procurement and construction management was organized by the Ministry of Health. UNICEF similarly worked closely with the Ministry of Education, to ensure ownership of the delivered facilities and methods. The UNDP worked closely with the Ministry of Environment and Green Development, the Ministry of Construction and Urban Development, and local soum governors. Although quality control was probably easier to manage by using UNDP procurement and construction administration, there were some shortcomings in terms of unclear transfer of assets and questionable cost recovery for the PUSOs.

Financial delivery rates averaged approximately 75% during the 3 years of project implementation. This low level of efficiency was a result of a number of factors, including:

- ✓ Water and sanitation interventions were under-estimated due to inadequate technical requirements at the project design phase;
- ✓ Technical solutions at the soum centres were not uniform (as assumed in the project design), due to geographic and infrastructure differences.
- ✓ Unforeseen procurement times, due to the shortage of interested and qualified contractors, and short construction seasons.

In the opinion of the evaluation team, the main reason certain activities ended up costing more than estimated was not due to inflation or unforeseen limited contractor capacity/availability, but rather because of insufficient information on technical requirements at the time of project development. Furthermore, there seemed to be a general lack of understanding of the project development flow process, as inadequate time was allocated for feasibility study, design, and procurement, nor was consideration made regarding the short construction season in Mongolia.

Based upon the findings of the terminal evaluation, it seems that the JP governance was too nationally focused. Both efficiency and effectiveness could have been enhanced with better and additional local coordination. Each of the executing agencies coordinated their activities with staff based in UB; it would have been more efficient to have local level coordinators overseeing activities for all agencies. Consultation with local stakeholders would have also been facilitated with local coordinators, as evident in the low acceptance of the protected springs at the target soums.

Coordination among government counterparts was also made mostly separately by each executing agency. More frequent project steering committee meetings (only 3 were held over the 3-1/2 years of project implementation) might have facilitated more dialogue among the government agency counterparts, identification of inefficiencies, and more effective joint agreement on resolving implementation obstacles.

7.3. Effectiveness

The JP satisfactorily contributed to attainment of outputs initially expected in the Project Document, through tangible and measurable improvements made to the human security of the target communities. Access to safe water supplies was increased, both primary health care and education were improved, and opportunities for alternative livelihood were developed. The quality of the delivered services and infrastructure were generally satisfactory, but there were some deficiencies observed. For example, the design of the protections made for water sources and springs did not meet international good practice, and the evaluation team leader observed poor construction quality of the indoor WASH facilities in the school buildings at the Bayangobi soum.

In opinion of the terminal evaluation team, the geographic coverage was too expansive, considering the budgeted cost and the limited local level coordinators deployed. Instead of focusing on 6 soums in 3 aimags, it might have been more effective to implement the JP interventions in 6 soums within the same aimag.

A number of decentralization measures have been implemented in Mongolia in recent years, and the JP was implementing during a time period when responsibilities of certain public services, including water and sanitation, were being transferred from the central level control to local level management. These circumstances facilitated demonstration of local water resources management models, for example, in the Bulgan soum where the local PUSO took over operation and maintenance of the upgraded water supply systems, but there were also constraining factors associated with the early stages of the decentralization process, e.g., unclear transfer of assets and flexibility of establish cost-based pricing.

The JP did indeed increase stakeholder dialogue with respect to rural development, e.g., the importance of improved water and sanitation among education, health care, and community development sectors. The engagement of government counterparts in ensuring the effective delivery of the JP interventions provides further inter-ministerial collaboration, including among the Ministry of Environment and Green Development, Ministry of Health, Ministry of Education, Ministry of Construction and Urban Development, Ministry of Agriculture and Industry, etc.

Complementary water and sanitation projects implemented by the UNDP, including the GoAL-WASH project, operated more or less in parallel with the JP, and capitalized on a number of synergies in creating design guidelines for small-scale water and sanitation systems, development of water and sanitation terminology standards, and assistance to the Ministry of Construction and Urban Development on the country's MDG road map with respect to water and sanitation goals.

With respect to gender-responsive good practice, the JP made notable contributions in the target communities. For example, the WHO efforts in primary health care training had particularly good results with women in the target communities. Local health care centres were successful in recruiting a number of women volunteers to perform maternal and child health outreach training in remote areas of the soums.

7.4. Ownership

There was generally good ownership of JP interventions, both at the national and local levels. Facilitating the establishment of 13 community based organizations (CBOs) is one model of

local participation in managing the protection of water supply sources and springs, and also in assisting herders in enhancing job security and developing alternative livelihoods.

Local health care centre managers and teachers and managers at the local schools also actively participated in the JP interventions. These staff members received intensive training and have already started to measure impacts by carrying out impact assessments. These examples of local engagement significantly enhanced both the effectiveness and sustainability of the interventions.

The level of ownership with respect to Objective 5, public outreach and dissemination of results, is evaluated as rather low.

7.5. Sustainability

Institutionalization:

The JP was actively supported by national institutions, separate government agency counterparts were linked to each of the participating executing agency, and also from local institutions, specifically, aimag governors, soum governors, health care managers, and school directors.

The participating national institutions have the technical capacity for continuing to work on a similar JP, but there should be a central level coordinating body to facilitate inter-agency collaboration.

Policy Change:

The primary health care and child friendly school interventions are tried and tested methods that both WHO and UNICEF have successfully implemented in Mongolia, and there is evidence of replication in other parts of the country. For example, the Umnugobi aimag mobilized a fund and expanded the health care waste management introduced by the WHO to 7 other health care facilities in the aimag. Furthermore, training manuals and awareness booklets produced by WHO and UNICEF have been widely used in other parts of the country. As part of the complementary UNDP implemented GoAL-WASH project, design guidelines for small-scale water-sanitation systems and water-sanitation terminology standards have been adopted by the Ministry of Construction and Urban Development in their planning activities, as well as by other government and educational institutions.

Community Ownership, Changing Community Norms:

Shortly after protection of water sources and springs were completed, there was evidence of lack of maintenance. For example, at both of the protected springs visited during the terminal evaluation mission, perimeter fence gates were either not secured or missing, and livestock were observed inside the protected areas. This suggests insufficient outreach to the local herder groups who are over-seeing the springs.

On other aspects of the JP, there was evidence of effective capacity building, e.g., with respect to primary health care and education. The trained people were observed to be actively engaged in implementing the introduced methods and procedures, and also have the capacity to carry out local impact assessments.

Resources:

There are committed and earmarked government resources for rural development, and likelihood for supporting the benefits produced by the JP is considered moderately likely. Within the next 3 years, from 2014 through 2016, the government plans to construct centralized water and sanitation systems for 100 soums. The JP target soums that have developed detailed design drawings should stand a good chance to be included into this program, as their level of preparedness is high. With respect to school financing, 2% of annual budgets are allocated for water and sanitation needs. According to UNICEF experts and international experience, this level of funding is insufficient, particularly considering that this includes both capital and operating expenditures. With these low levels of financial support, will be difficult to maintain and operate the upgraded facilities provided by the JP.

At the soum level, resources are limited (e.g., for spare parts for health care equipment provide to local hospitals), and costs for upgraded water supply systems (e.g., at the Bulgan soum) will likely not be matched by collected revenues (price on water).

7.6. Evaluated Achievement of Project Goal and Outputs

A summary of the evaluated achievement of the project goal and outputs, as measured against targets in the project logical results framework is presented in the table below. The achievement of project goal and outputs are presented according in the following two categories:

	Good Achievement. Intended targets mostly attained.
	Satisfactory Achievement. Intended targets partially attained.

Goal/Output (Targets)	Objectively Verifiable Indicators	Achievement
<p>Human Security Goal: To alleviate social inequality of most neglected and vulnerable populations affected by both serious poverty and climate change in South Mongolia (the Gobi-areas), in order to enhance their human security with integrated, multi-sectoral and prevention measures.</p>	<p>% of community members with the access to safe water among population in the target communities</p> <p>% of children with the access to the formal education among all children in the target communities</p> <p>% of population with access to the primary health care</p> <p>% of increase of population out of poverty line</p>	<p>Actual access to water supply was not achieved in 4 of the 6 soums. Technical design drawings were prepared for these soums, but this was not the target.</p> <p>Satisfactory achievement made toward access to formal education and primary health care.</p> <p>No quantitative evidence available indicating % of population lifted out of poverty line.</p>
<p>Objective 1: To increase the access to safe drinking water among the vulnerable community members severely affected by climate change, and build qualitative capacity of both local government and service providers in 6 pilot soums of the target Provinces (UNDP)</p>		
<p>Output 1.1: Up to 80 percent of households in the target area have access to improved water sources and sanitation facilities</p>	<p># of wells created and rehabilitated</p> <p># of public baths created</p> <p># of protected water sources</p> <p># of events organized</p> <p>% of community members satisfied</p> <p>% of households with access to improved water sources and sanitation facilities by 2012</p>	<p>At the end of the project in 2013, access to improved water supply not provided in 4 of the 6 soums.</p> <p>No public baths created.</p> <p>Protected water sources not made according to international best practice.</p>

Goal/Output (Targets)	Objectively Verifiable Indicators	Achievement
Output 1.2: At least one CBO in each soum established and its operation become sustainable to manage drinking water source, public bathhouse and solid waste collection.	# CBO members trained # CBOs created # of facilities managed and operated by CBOs % of community members satisfied with the service % of increased income for CBO members (financial sustainability)	CBOs were created to manage protected springs, but capacity is limited, e.g., livestock observed in each of the 2 visited protected springs. One PUSO engaged to manage water supply; revenue likely less than operating costs.
Output 1.3: A policy and regulatory framework developed and piloted with a specific focus on rural Water Supply and Sanitation (WSS) as climate change adaptation measures.	# study finding discussed and validated by the policy makers # of piloted soum level WSS management structure # of trained personnel	The PUSO engaged in the Bulgan soum considered the WSS management model. Validation at local level but no evidence at national, policy level. Water demand management lacking, thus cannot be considered a climate change adaptation measure.
Objective 2: To improve the quality of formal education through providing rights-based child- friendly schools that are inclusive, gender-sensitive, healthy, safe for and protective of children, involving their families and communities (UNICEF)		
Output 2.1: All the six target schools will be developed as model child-friendly schools in their soums	# of workshops/trainings conducted for school staff on CFS features # of trainings conducted for students on proper hygiene and environmental issues # of school child-led organizations newly established # of schools that develop and use a school development plan which includes CFS features	Child-friendly school methods successfully implemented in schools in each of 6 soums. Training carried out, high levels of ownership observed.
Output 2.2: 80 percent of school children in the target areas will have access to improved water and sanitation facilities	# of WATSAN facilities built # of school children with access to improved water source and sanitation # of IEC materials developed of teachers, caregivers and students participated in training and % of people improved their knowledge on M&O and latrine construction # of families constructed households latrines	Water supply wells constructed at 2 of the 6 soums (a well at a third soum under construction at time of terminal evaluation). At close of project, schools in 2 of the 6 soums lack water supply. Improved sanitation provided in school buildings in each of 6 soums, through partnership with the Red Cross.
Output 2.3: 90 percent of school children in the target areas will practice proper behaviours focusing on environment protection and hygiene	# of children, caregivers and teachers trained % of participants improved their practices. # of PSA and of IEC materials developed	Training delivered to teachers and children, with supporting documentation. No metrics available indicating change of behaviour.
Output 2.4: Data on environment will be integrated in the education M&E system and cost-analysis managed by the Ministry of	Quality of report delivered and regulatory framework developed by policy makers	This target is unclear, and no evidence available to enable evaluation.

Goal/Output (Targets)	Objectively Verifiable Indicators	Achievement
Education, Culture and Science and Water Authority Agency		
Objective 3: To enhance the access and quality of people-centered primary health care (PHC) with gender-sensitive consideration, by reducing exclusion and integrating health into other multisectoral perspectives including climate change, gender and human rights (WHO and UNFPA)		
Output 3.1: An integrated PHC package is developed based on community needs living in all 6 selected soums to be clearly defined with full participation of the local governments, PHC teams and communities and utilized in planning, implementing and evaluating the people-centered services	# of workshop conducted # of trained personnel to conduct needs assessment on PHC Protocol and questionnaire available for needs assessment on PHC	Effective training delivered, comprehensive needs assessment completed, and high level of ownership for impact assessment with own resources.
Output 3.2: 6 pilot soum health facilities improved for quality health services and with safe water, sanitation and health care waste disposal facilities in place as models for communities	# of soum health facilities with improved water, sanitation and health care waste disposal	Access to safe water provided (or available beforehand) at most of the hospitals. However, limited water analyses made to ensure suitability for drinking purposes. Improved health care waste management equipment and procedures provided. Still need to resolve final disposal with soum government.
Output 3.3: 80 percent of all populations in 6 soums , including infants, women of childbearing age, adolescents, elderly and minority groups, covered in a newly developed integrated essential package of key health interventions for PHC	Integrated PHC package available #of soum health care workers trained on integrated PHC package implementation % of communities covered with PHC services	Integrated PHC package delivered, and health care workers trained. Each of the 6 soums was covered in the PHC services.
Output 3.4: Stakeholders participated in the workshops and training programmes on PHC planning & evaluation, gender mainstreaming & human rights issues, and information sharing, to strengthen coordination and integrate all efforts.	# of stakeholders consultative meetings on PHC conducted per soum	Effective trainings delivered; clear evidence of local ownership.
Output 3.5: Increased knowledge, awareness and preparedness on the effects of climate change and health among communities, populations, health care workers and other related sectors in six target soums improved.	# of health care workers, other sector staff and community leaders trained on how to deal with climate change and health issues Soum specific climate change and health action plans developed Knowledge, attitude and behaviour of community on climate change and its effects improved	Climate change preparedness plans completed in each of the 6 target soums. Knowledge of potential climate change impacts to health better understood by local stakeholders. Limited funding available from central government for implementing preparedness plans. Water safety plan was developed in each of 6 soums as part of climate change activities.

Goal/Output (Targets)	Objectively Verifiable Indicators	Achievement
Objective 4: To provide the target communities with income generation opportunities through community-based organizations, in order to empower their economic security and sustain their livelihood (UNDP)		
Output 4.1: Specific technical and organizational needs of up to the selected 18 selected existing business groups, such as cooperatives, producers' groups and/or community enterprises and organizations, are identified.	# and types of needs for the project intervention identified and sorted.	Comprehensive needs assessment completed, and 18 business groups selected.
Output 4.2: All of the 18 selected existing business groups sustain their businesses in active operation with technical and organizational support from the project.	# of the project supported business groups in active operation Average % of increase in the sales income of the business groups # of jobs with the business groups	No evidence available regarding % increase in sales income, or number of jobs created.
Output 4.3: At least 12 new business groups/community enterprises with 100 new job opportunities are established through vocational and entrepreneurship training for youth and unemployed community members in the target sites.	# of the project supported business groups in active operation Average % of increase in the sales income of the business groups # of jobs with the business groups	Also, no evidence available on % increase in sales income.
Output 4.4: At least 50% of the business groups receive microfinance from formal financial institutions with the support/facilitation from the project.	# of newly established business groups/community enterprises # of job opportunities newly created with the new groups/enterprises	There was no evidence available regarding the % of business groups receiving micro-financing.
Objective 5: To share the lessons-learnt from this pilot initiative using the human security approach to wider audience of both national and regional stakeholders in Mongolia (UNCT Joint Initiative: UNDP (lead), UNICEF, WHO, and UNFPA)		
Output 5.1: The concept of human security is widely understood to both central/local governments and community populations while implementing the pilot initiative	# of forums organized	General low level of understanding of human security concepts observed during evaluation mission interviews.
Output 5.2: Discussion over the importance of concept and its successful implementation in the fields is widely recognized through public forum and other events	# of forums organized # of participants understanding HS concept	General low level of understanding of human security concepts observed during evaluation mission interviews.

7.7. Evaluation Ratings

The evaluation ratings broken down by objective are summarized below.

Objective	DESIGN	PROCESS LEVEL		RESULTS LEVEL	
	Relevance	Efficiency	Ownership	Effectiveness	Sustainability
Objective 1: Water-Sanitation	3	4	3	3	3
Objective 2: Education	2	2	2	2	2
Objective 3: Primary Health Care	2	2	2	2	2
Objective 4: Job Security	3	3	3	3	3
Objective 5: Outreach	4	3	4	4	4
Overall Project	3	3	3	3	3

<u>Rating Description:</u>	<u>Rating Score:</u>
Excellent:	1
Good:	2
Satisfactory:	3
Unsatisfactory:	4
Not applicable:	5
Insufficient information:	6

8. RECOMMENDATIONS, GOOD PRACTICES AND LESSONS

8.1. Actions to follow up or Reinforce Initial Benefits from the Project

The following actions are recommended to follow up or reinforce the initial benefits realized from the project.

- ✓ The results and lessons learned by the JP should be proactively disseminated among relevant government agencies, donor organizations, and other stakeholders. For example, decentralized water supply and sanitation for vulnerable sectors of rural communities should be promoted as viable short to medium term solutions of improving the human security of these people. One method of dissemination could be holding a project closing workshop and inviting key government agency directors and people responsible for rural development strategies and planning, as well as representatives from donor agencies with complementary development assistance objectives.
- ✓ Constructed and/or upgraded sources of water should be tested for minimum, health-based drinking water quality parameters including arsenic, barium, boron, chromium, fluoride, and selenium (WHO Drinking Water Quality Guidelines, 4th edition, 2009) in addition to microbiological parameters known to be prevalent in animal husbandry-based herder communities. Supply networks should be regularly disinfected and representative samples tested frequently by independent laboratories for microbiological parameters.
- ✓ As a way to ensure consistent overall operation and maintenance of publicly owned infrastructure and also to minimize perceptions of replacing the State's role in providing water supply and sanitation, the local PUSOs could be assigned responsibility to operate and maintain the decentralized water and sanitation facilities constructed at schools and hospitals of the target soums. The PUSOs have dedicated skilled technicians, and preventative maintenance and reparations should also be more efficient if such an

entity takes responsibility for all public buildings. Furthermore, such an arrangement would help facilitate possible subsequent connection of the hospitals and school buildings to centralized systems in the soum centres. Certain issues would first need to be negotiated; including ownership of water-sanitation assets, payment for services, etc.

- ✓ Protected springs at the target soums should be upgraded to meet international good practice, e.g., installing spring boxes. And, before implementing the upgrades, consultation should be made with local herders groups to determine what incentives could work to shift their behaviour of bringing livestock into the protected spring boundaries.
- ✓ Decentralized water supply sources developed as part of the JP should be fully characterized by testing representative samples for parameters of potential health significance, according to WHO guidelines on drinking water quality. For each user, e.g., hospital, school, community, a fact sheet should be provided that explains the water quality testing results, and indicates the importance of keeping up with maintenance and regular testing of the water systems in order to ensure safe drinking water supply.
- ✓ Where there are mechanisms or programs in place, monitoring & evaluation of the implemented interventions should continue, so that impacts can be more meaningfully assessed after a number of years of data are available. For example, the local hospitals are keeping records of incidence of illness and disease, and these data could be shared with the WHO. Similarly, the local schools are regularly assessing the effectiveness of the child development centres, and UNICEF could use this information in their overall evaluation of children friendly school program.
- ✓ Cross-cutting linkage with climate change adaption and preparedness should be established. For example, several deep groundwater wells were constructed as part of the water supply interventions implemented by the JP. Regular monitoring of groundwater levels and conditions in these wells could add to the climate change knowledge base in the country, and help both local and national authorities more efficiently manage their scarce water supplies.

8.2. Proposals for Future Directions Underlining Main Objectives

Considering possible future directions underlining the main project objectives, the following recommendations are presented.

- ✓ Integrated water resource management (IWRM) should be promoted, possibly on a pilot scale at a particular soum. With international IWRM experience, the UNDP has a comparative advantage to demonstrate the realized benefits, such as reducing resource use conflicts, efficient use of scarce water supplies, and cost-reflective pricing.
- ✓ Public buildings were the main focus of the water and sanitation improvements and planning under the JP, and the Government soum level development program also is based upon providing service to public buildings. Residential buildings are under-represented, and it is unclear whether private septic water supply from kiosks in the soum centres are the long-term solutions for residential users in the soum centres, or whether a more cluster-based approach is envisioned. Water and sanitation needs should be planned with a community-wide perspective.

- ✓ Economic security might be improved in the soum centres by introducing vocational training at the secondary school level, with the aim of increasing livelihood opportunities and strengthening local technical capacities, e.g., in skills such as concrete masons, plumbers, roofers, etc. Such interventions would also help address the large capacity gap between the larger cities and the rural soum centres.
- ✓ Local communities should be supported with integrated waste management planning, including safeguarding disposed sterilized health care wastes, to improve protection of public health and environmental resources.
- ✓ International donor agencies, including UNICEF, should compile best practices from other countries regarding minimum funding required to maintain not only water and sanitation facilities but also general building structure and services. This information should be shared with the Ministry of Education, and strategies jointly worked out to reach reasonable funding goals and mechanisms.

8.3. Good Practices

- ✓ Enhancing local empowerment increases the likelihood for sustainability of the deployed intervention.
- ✓ Water supply and sanitation for certain vulnerable sectors of the soum communities can be met over the short to medium term by providing decentralized solutions.
- ✓ Implementing of tried and tested methods (e.g., primary health care capacity building and child friendly schools) enables resources to focus on actual implementation.

8.4. Lessons Learned

A few of the lessons learned through the JP implementation are presented below.

- ✓ For projects including construction and/or delivery of equipment, sufficient conceptual design is required. In fact, preferably front-end engineering design should be carried out at the project development stage, in order to more accurately determine the technical requirements and costs of the planned interventions, so that sufficient budget and time is allocated for implementation.
- ✓ Available funds should focus on higher priority interventions, increasing the likelihood of achieving targeted objectives and avoiding spreading resources too thin. For example, geographic coverage should be consistent with the resources and time constraints of the project.
- ✓ With respect to joint programming, efficiency and effectiveness could be improved if more consideration is placed on evaluating beneficial synergies in joint procurement, joint coordination, and joint financial accounting and reporting.
- ✓ Quality of delivered interventions and effectiveness of capacity building can be enhanced by employing field coordinators and/or social mobilizers.
- ✓ If there is a considerable amount of time between when a project is developed and the date of starting implementation, there should be an opportunity to reconcile scope, budget, and the logical results framework during an inception phase to reflect current circumstances. For example, the government priorities at the time of project development and implementation might not coincide, simply because there are

different people in certain decision-making positions. Also, there could have been independent developments at the project sites, and thus interventions should be adjusted or removed from the program. Costs could also be significantly different, based upon inflationary pressures, competition for capacities, etc.

- ✓ The significant technical capacity gap between the larger cities in Mongolia and the soum centres and the short construction seasons need to be carefully factored into work programming and budgeting.
- ✓ The portable water testing equipment provided should not be used as an indicator of the suitability of a drinking water supply, and the use of the equipment could give the users a false sense of security. After a water supply is characterized as being suitable as drinking water, microbiological parameters, often attributed to distribution system operation or damage, are the main causes of water-borne illness. Efforts should focus on regular disinfection of water supplies and/or networks, and regular testing from qualified, independent laboratories.
- ✓ Waste recycling depends firstly upon viable markets. There could be some limited economic opportunities from collection/sale of PET, but overall, there are limited incentives for recycling due to the small quantity of waste in the soum centres and the limited market opportunities.

9. ANNEXES

Annex 1: Itinerary for Evaluation Mission

Days	Timing	Activity	Persons to be involved	Responsible/Venue
Arrival: at 6:00 am on 11 September 2013, Wednesday				
11 September 13 Wednesday	10:00AM 12:00PM	Meeting: Officers of UN Agencies and PIU	Mrs. J. Chimeg, PA, UNDP Mr. N. Batnasan, Officer, UNICEF Ms. B. Altanzagas, Officer, WHO Ms. Eri Taniguchi, Officer, UNFPA Ms. G. Otgonbayar, NPC, UNJPWS	<i>J. Chimeg, UNDP G. Otgonbayar, PIU</i> Meeting Room at UNDP
	1:00PM 2:00PM	Security Briefing	Ms. G. Otgonbayar, NPC, UNJPWS	<i>At the Country Office</i>
	2:30PM 3:30PM	Briefing	Ms. Sezin Sinanoglu, RC, UNCT Ms. J. Chimeg, PA, UNDP Ms. Bunchingiv Bazartseren, UNDP Ms. G. Otgonbayar, NPC, UNJPWS	<i>J. Chimeg, UNDP G. Otgonbayar, PIU</i> RR's Office
	4:00PM and on	Meeting: Representatives of UN Agencies	Ms. Ms. Sezin Sinanoglu, RC, UNCT Mr. Gille Fagninou, DR, UNICEF Dr. Salik Govind, NCD Team Leader, PMO, PHS, WHO Ms. Oyuntsetseg, DR, UNFPA	<i>J. Chimeg, UNDP N. Batnasan, Officer, UNICEF B. Altanzagas, Officer, WHO Eri Taniguchi, Officer, UNFPA G. Otgonbayar, NPC, UNJPWS</i> At the Country Office
12 September 13 Thursday	9:00AM 10:00AM	Meeting: MEGD	Mr. D. Gantulga, Director General, Policy Implementation Coordination Department of MEGD and NPD, UNJPWS	<i>G. Otgonbayar, PIU</i> Director's Room in MEGD
	10:30AM 12:00PM	Meeting: National Water Committee (NWC)	Mr. Ts. Badrakh, General Secretary	<i>G. Otgonbayar, PIU</i> Office in NWC
	1:00PM	Field Trip begins		
12-16 September 13 Thu-Mon	Field Trip to Bulgan soum, UM aimag and Bayangobi soum, Bayankhongor aimag (See the Field Trip Agenda below)			
17 September 13 Tuesday	9:00AM 10:00AM	Meeting: MCUD	Ms. R. Erdenetsetseg, Director General, Housing and Public Utilities Implementation Coordination Department, MCUD	<i>G. Otgonbayar, PIU</i> Office in MCUD

	11:00AM 12:00PM	Meeting: MoH	Dr Sh.Urantsetseg, Officer of EH, MOH Ms. Ya. Bayartogtokh, senior officer of Finance and Investment, MOH Dr Kh.Shurentsetseg, researcher, National Center of Public Health	<i>B.Altanzagas, WHO</i> Office in MoH
	1:00PM 2:00PM	Meeting: MIA	Mr. Sh.Baranchuluun, Senior Officer	<i>G.Otgonbayar, PIU</i> Office in MIA
	3:00PM 4:00PM	Meeting: MES	Ms. B.Dulamkhand, Senior Officer	<i>N.Batnasan, PIU</i> Office in MES
	4:30PM 5:30PM	Meeting: MUST	Dr. D.Basandorj, Professor Mr. J.Davaatseren, Professor	<i>G.Otgonbayar, PIU</i> Office in MUST
18 September 13 Wednesday	Morning	Consultants Desk Work		International and National Consultants
	Afternoon (TBD)	Presentation of Draft Final Evaluation	All parties	International and National Consultants UN Conference Room
	TBD	De-briefing	Ms. Sezin Sinanoglu, RC, UNCT Ms. J.Chimeg, PA, UNDP Ms. G.Otgonbayar, NPC, UNJPWS	<i>J.Chimeg, UNDP</i> <i>G.Otgonbayar, PIU</i> RR's Office
Departure: 07:10AM on 19 September 2013				

Prepared by: Ms. G.Otgonbayar, NPC, UN Joint Programme on Water and Sanitation (UNJPWS)

Reviewed by: Ms. J.Chimeg, PA, UNDP
Mr. Bishnu Pokhrel, WASH Specialist, UNICEF
Ms. B.Altanzagas, Officer, WHO
Ms. Eri Taniguchi, Officer, UNFPA
Mr. James Lenoci, IC

Annex 2: Joint Programme Field Trip Itinerary

Background and Main Purpose

In accordance with the UN policies and procedures and UNTFHS project implementation guidelines, a terminal evaluation of the UN Joint Programme “Promoting Social Equality in the Gobi-Areas of South Mongolia by Fostering Human Security with Integrated and Prevention Approaches”, short title “UN Joint Programme on Water and Sanitation (JP) in Mongolia” is to be undertaken in 2013. The JP started in August 2010 and is in its final year of implementation. This Terms of Reference (TOR) sets out the expectations for this terminal evaluation of JP.

The main purpose of this position is to assess the progress and achievements against the project’s logical framework. The Terminal Evaluation will be conducted by the team of consultants consisted of International (Team Leader) and National Consultants.

The planned field trip will be held between 12 and 16 of September 2013 to two specific project targets soums for approximately 5 days.

1. Specific Objectives

- To assess the extent the JP has contributed to solving the needs and problems identified in the feasibility study and/or baseline survey;
- To ascertain the degree of implementation, efficiency and quality delivered on outputs and outcomes against what was originally planned or subsequently officially revised;
- To measure to what extent the JP has attained development results for the targeted population, beneficiaries, participants including individuals, communities and institutions using the logical framework;
- To assess the joint project contribution to the objectives set in the Comprehensive National Development Strategy based on Education, Health, Livelihood, Water Supply and Sanitation MDG at national and local levels, and;
- To identify lessons learned and good practices as a result of the JP implementation within the various programme components with the aim to support the sustainability of the JP or some of its components.

2. Expected Outputs

The results of the interviews, surveys, and/or collected data for the evaluation. The evaluation team will make sure that the voices, opinions, and information of targeted citizens and participants of the JP are taken into account.

3. Field Trip Members:

1. Mr. James Lenoci, International Consultant
2. Mr. D.Munkhbaatar, WSSS, MON/08/302 Project
3. Mr. N. Batnasan, WASH Officer, UNICEF Mongolia
4. Mr. G.Ganbaatar, Driver, MON/08/302 Project

Period: 12– 16September 2013 (Approximately 5 days and 4 nights)

Vehicle:2- Jeeps:

1. UNL5843, MON/08/302 Project
2. One car from UNICEF

4. Joint Programme Field Trip Itinerary

No	Date	Trip Hours	Activity
1.	12 September13, Thursday	13:00-18:00	Drive from Ulaanbaatar to Mandalgovi City of Dundgoviaimag (280km)
2.	13 September 13, Friday	07:00-11:00	Drive from Mandalgovi City, DU aimag to Dalanzadgad City of UM aimag (300 km)
		11:00-12:30	Meeting with the Aimag Governor and other relevant Officer at the Aimag Governor's Office
		14:00-15:30	Drive from Dalanzadgad City to Bulgan soum of UM aimag (100km)
		15:30-16:30	Meeting with the Soum Governor and other relevant Authorities at the Soum Governor's Office
		16:30-19:30	Tour through the soum centre for project implemented activities including water supply system, health clinic, school and kindergarten and conduct interviews of the relevant local authorities and communities
3.	14 September13, Saturday	07:00–18:00	Drive from Bulgansoum, UM aimag to Bayangovi soum of Bayankhongor aimag (370 km)
4.	15 September 13, Sunday	08:00-09:00	Meeting with the Soum Governor and other relevant Authorities at the Soum Governor's Office
		9:00-12:00	Tour through the soum centre for project implemented activities including water supply and sewerage system, health clinic, school and kindergarten and conduct interviews of the relevant local authorities and communities
		13:00-15:00	Visit to one of the protected springs near by the soum centre (100km-2 ways)
		15:00-20:00	Drive from Bayangovi soum to Bayankhongor City of Bayankhongor aimag (270km)
5.	16 September 13, Monday	07:00-20:00	Drive from Bayankhongor City to Ulaanbaatar (640km)
Total distance: 2200 km (included tours in UB, aimag and soum centres)			

Prepared by:

G. Otgonbayar, NPC, UNWSJP

Agreed by:

J. Chimeg, UNDP
 Bishnu Pokhrel, UNICEF
 B.Altanzagas, WHO
 Eri Taniguchi, UNFPA
 James Lenoci, IC

Annex 3: List of Documents Reviewed

Project documents and deliverables:

- ✓ Full project proposal (approved), 10 February 2010
- ✓ Annual project progress report, June 2011 to May 2012
- ✓ Annual project progress report, June 2012 to May 2013
- ✓ Minutes, JP Committee Meeting, 03 September 2010
- ✓ Minutes, JP Committee Meeting, 20 December 2011
- ✓ Minutes, JP Committee Meeting, 10 January 2013
- ✓ Minutes, UNCT Meeting on UN JP on Water and Sanitation, 18 October 2012
- ✓ Log frame, 2010 March 23
- ✓ UNJPWS: consolidated progress update (delivered to evaluation team Sep 2013)
- ✓ UNTFHS Rapid Assessment, Feb 2013, Horekens J.
- ✓ Baseline Survey, "Comprehensive community services to improve human security for the rural disadvantaged populations in Mongolia", 2010, CSD Consulting Ltd.
- ✓ Final Report, Construction of Water and Sanitation Services For Bulgan Soum, Umnugovi Aimag & Zereg Soum, Khovd Aimag, by Tilak Gamage, Sep 2013
- ✓ Water Quality of Target Soums (Excel file compilation)
- ✓ Financial expenditure report, UNDP
- ✓ Financial expenditure report, UNICEF
- ✓ Financial expenditure report, WHO
- ✓ Financial expenditure report, UNFPA

Other documents:

- ✓ GoAL WaSH leaflet (in English), 2012
- ✓ Terms and terminology standard of WSS (in Mongolian and English), 2012
- ✓ Monotype Design Drawings Album on Small Scale Wastewater Treatment Facilities, 2012
- ✓ ALP and EMP-2, Dec 2012: Evaluation of the Livelihood Support Projects of UNDP Mongolia, including the Alternative Livelihoods (ALP) and Enterprise Mongolia Project Phase II (EMP-2), 28 December 2012, Thompson R. et al.
- ✓ Ex-post evaluation, Comprehensive Community Services to Improve Human Security for the Rural Disadvantaged Populations in Mongolia, May 2012, Baltzersen J. and Ts. Bumkhorol
- ✓ Feasibility Study for indoor Wastewater Treatment Options in Public Buildings of the Project Target Areas, Civil Engineering Consulting Co., Ltd., 2009, MON/08/302 Project
- ✓ IMPROVING LOCAL SERVICE DELIVERY FOR THE MILLENNIUM DEVELOPMENT GOALS, D.Basandorj & Satyajit Singh, 2009

Annex 4: Ethics Statement signed by Evaluation Team

United Nations Code of Conduct for Evaluations

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and: respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

We confirm that we have abided by the United Nations Code of Conduct for Evaluation outlined above.

15 October 2013



James Lenoci
International Consultant / Team Leader

Ts. Bumkhorol
National Consultant

Annex 5: Evaluation Team’s Responses to draft v1 report comments

Comment	Response by Evaluation Team
<p>UNFPA. Executive Summary. Is this correct project duration? I thought no-cost 6 month extension is from June to Nov. 2013</p>	<p>The date is changed to November 2013.</p>
<p>UNDP. Executive Summary, Major Project Strengths and Achievements Would be good to reflect this statement in line with the rate given in page 8.</p>	<p>The evaluation team concurs with this comment, and ratings were re-considered based upon additional evidence provided by each of the JP executing agencies. Please note that the <u>Design</u> level ratings are provided only for “relevance”.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Programme Management and Coordination The joint procurement and construction work was planned. Please see the attached joint plan among the agencies. Because of the separate financing and reporting, some of the planned activities cancelled. One example for Bulgan WS construction case, if UNDP waited a decision from UNICEF, we could have waist time and none of construction happened.</p>	<p>The evaluation team concurs with the comment. No changes were made to the report text.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Programme Management and Coordination This has been conducted in deed quite well. Would be good to remove this specific words. Joint monitoring field trips were introduced in the last years of the implementation period that helped to get organized to jointly find technical solutions for issues faced by agencies.</p>	<p>The statement is reworded as follows: Joint monitoring field trips were introduced in the latter part of the implementation period in order to evaluate joint responses to issues faced by the agencies. In hindsight, designing joint field coordination and supervision as an implementation modality, e.g., sharing one social mobilizer and/or field coordinator in each of the target soums, might have resulted in improved efficiency and effectiveness.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Water and Sanitation, Access to Improved Water and Sanitation Please reconsider this number. Would be good if you put argument whether the target 80% is achieved or not.</p>	<p>The target aimed to achieve 80% of the households with access to improved water and sanitation. Among the 6 target soums, water supply was improved in one soum (Bulgan), water supplies were constructed for 3 school complexes and in 1 health care facility. And, sanitation improvements were made at school complexes in 5 soums. The evaluation team was not provided with</p>

Comment	Response by Evaluation Team
	<p>monitoring metrics showing the number of households with improved water and sanitation. Considering the above-listed accomplishments, baseline conditions were not significantly changed during the lifespan of the project, as the designed centralized systems are pending government funding.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Water and Sanitation, Access to Improved Water and Sanitation</p> <p>To me this recommendation does not match the above observation. I believe it is better to plan thinking long term than short term fixes considering government plans for centralized water and sanitation infrastructure improvements. It would save money in the long run. I am not sure what interim water supply systems possible given potential solution is often ground water.</p>	<p>Providing decentralized water supply for schools and health care facilities is not only a “short fix”. Water supply to these vulnerable community groups should be a priority, whether centralized or decentralized. If government funding eventually is realized for centralized public systems, such decentralized solutions should not be considered redundant, in fact, stand-by supply for such users should be ensured.</p> <p>The recommendation is reworded as follows: Decentralized water sources, particularly for vulnerable groups such as schools and health care facilities, should be considered for any soum that are 2 years or more away from getting funding for a centralized facility. This may not be in alignment with national priorities, but it is in alignment with MDGs. In this case, shift budget funds away from <u>designing</u> centralized facilities and into <u>constructing</u> actual interim supply sources, particularly for vulnerable members of the communities.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Water and Sanitation, Under-estimated Costs</p> <p>Good comment. Would be good to reconsider the rate in line with this statement given in page 8.</p>	<p>Ratings are reconsidered on page 8.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Integrated Water Resource Management</p> <p>This is important. But this was not in project scope. Would like to suggest as one of the overall recommendation for future JP.</p>	<p>Considering the concerns outlined in the preparatory phase regarding climate change impacts, IWRM should have been incorporated in the design. This is also relevant for future interventions, and we have indicated in Section 8.2.</p> <p>The recommendation also moved to the</p>

Comment	Response by Evaluation Team
	<p>overall recommendations (Section 8), the following statement added:</p> <p>Using UNDP’s comparative advantage, integrated water resources management and water demand management should have been promoted in the project design, possibly at one of the target soums as a pilot case.</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Insufficient characterization of water supplies</p> <p>Good comment. This is also a part of the design issue. It is extremely important to source water quality profile in pre planning period. Would like to suggest as one of the overall recommendation for future JP.</p>	<p>The evaluation team considers characterization of water quality of constructed and/or upgraded drinking water sources according to WHO guidelines as a <u>minimum</u> requirement. If funds were not budgeted in the design, then this is a design shortcoming.</p> <p>The following statement is added:</p> <p>Water quality characterization should have been part of project design and budget.</p> <p>The recommendation also moved to the overall recommendations (Section 8).</p>
<p>UNDP. Executive Summary, Key Shortcomings and Recommendations, Insufficient characterization of water supplies</p> <p>Please delete these words. The spring protection was not meant for water supply in the settlement areas. In the project scope, springs to be protected was to consider the following features:</p> <ol style="list-style-type: none"> 1. Fence an area at least 50 meters in all directions around the spring outlet to prevent contamination by animals and people who are unaware of the spring's location. 2. Avoid heavy vehicle traffic over the uphill water bearing layer to prevent compaction that may reduce water flow. <p>The protected springs are in almost desolate areas mostly contaminated from animal stamping sometimes vehicle compacting. The main purpose was to prevent springs from drying up or shrinking even disappearing in gobi area. If building spring box was in the project scope, the fund and timeframe should have been carefully considered with bit higher</p>	<p>The evaluation team maintains their position that spring boxes should have been designed and constructed for the protected springs.</p> <p>At both locations visited, the gate to the fence was either open (Bulgan) or missing (Bayangobi), and livestock faeces were observed right at the spring source at the location near Bayangobi. Furthermore, the evaluation team was informed that the spring there is used by many of the villagers, as the people believe the water has healthful properties.</p> <p>The cost for providing spring boxes would not have been prohibitive, and would have offered the required protection, particularly considering that the fenced solutions are not respected by local herders.</p>

Comment	Response by Evaluation Team
capital investment including design and construction. I would like to suggest this recommendation for future JP.	
<p>UNICEF. Executive Summary, Key Shortcomings and Recommendations, Education, Poor Condition of School Buildings</p> <p>Yes it is correct. But this component was not part of the project scope.</p> <p>UNDP:</p> <p>This is a justified observation and comment. However, every project and programmes have prior agreed goals, objectives and outcomes, and earmarked budget and other resources. Thus, the issue raised here is beyond the agreed scope of the interventions within the Joint programme, funded by UNTFHS. I recommend that this recommendation is not included here, but it can be mentioned in the general observation part...</p>	<p>The evaluation team concurs with these comments. This issue will not be considered a project shortcoming, and the recommendation will be moved to Section 8.2 of the report.</p>
<p>WHO. Executive Summary, Key Shortcomings and Recommendations, Health Care Waste Management</p> <p>See below under Section 4.3.</p>	<p>See response below under Section 4.3.</p>
<p>UNDP. Section 4.1 Water and Sanitation, Output 1.2 targets</p> <p>The PIU conducted bidding for design on public bathhouse three times. Due to the insufficient bidders; this activity cancelled.</p> <p>Based on the local community and authorities, the recycling solid waste activity was proposed and implemented for the soum as an initial stage for the solid waste management improvement with limited budget.</p>	<p>The evaluation team understands the issues indicated. No changes made in this section of the report.</p>
<p>UNDP. Section 4.1 Water and Sanitation, Accomplishments</p> <p>Seems UNFPA accomplishment missed.</p>	<p>The evaluation team does not understand the comment. UNFPA accomplishments are outlined in the discussions under Objectives 3 and 4.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations</p> <p>Bulgan. According to the Feasibility study, suggested to provide main line and reconsider</p>	<p>The evaluation team understands the comment.</p>

Comment	Response by Evaluation Team
the connection to the public buildings due to the open source supply like a spring.	
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations</p> <p>Tsogt-Ovoo soum. Please add mention here that the design drawings developed for centralized system, the branch connections did not constructed during the project cycle. This soum got approval from the government for state budget next year.</p>	<p>The approved project document includes “Rehabilitate or establish water sources, public bathhouses and waste water treatment facilities connecting public buildings in 6 soum centres”.</p> <p>Interviewed government officials informed the evaluation team that financing for soum water and sanitation improvements will be decided in December 2013. No evidence was found by the evaluation team that the soum has obtained government approval.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations</p> <p>Bayaan Uul. Will be connected based on the developed DDDC. Construction was not in the project scope.</p>	<p>The approved project document includes “Rehabilitate or establish water sources, public bathhouses and waste water treatment facilities connecting public buildings in 6 soum centres”.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations</p> <p>I think all possible actions based on the feasibility study were taken as pre-condition for further development by the locals. It would be good to give recommendation on how should be done for the future JP. Capital is needed centralized or decentralized. Sometimes, centralized solutions can be cheaper than several decentralized solutions. Wastewater management is bit more challenging with centralized systems.</p>	<p>The evaluation team feels that water supply to these vulnerable community groups, such as schools and health care facilities, should be a priority, whether centralized or decentralized. We also agree that wastewater collection and treatment is likely better handled in by a cluster approach for residential buildings, rather than centralized systems that could be cost prohibitive.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, Protected Springs</p> <p>Please move to the overall recommendation for future JP.</p>	<p>The evaluation team maintains their position that the protected springs do not meet international good practice. See comments above under Executive Summary.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, PUSO</p> <p>Ideally, Soum is the best institution to manage water and sewer systems, but given administrative structure, and capacity of local government, PUSO is the practical solution for</p>	<p>This recommendation is included in the overall recommendations (Section 8)</p>

Comment	Response by Evaluation Team
the time being.	
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, Climate Change Adaptation</p> <p>Please shift it to the overall recommendation.</p>	<p>The human security dimension in the target soums is directly affected by water scarcity, and due to predicted climate change effects, water supplies will become even more limited. Our comment is directed toward the design, i.e., climate change adaptation approaches, including IWRM, monitoring, etc., should have been better integrated into the project formulation.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, Water Quality</p> <p>Agree. It is important to get water quality profile during planning period to provide level of technology to treat the water to drinking water standards.</p> <p>All existing wells have “well passport” with all necessary information.</p>	<p>For constructed wells or upgraded springs, water quality testing should be made before commissioning. The main concern is to ensure that the delivered water meets minimum WHO drinking water quality guidelines.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, Portable Water Laboratories</p> <p>Please do not neglect the importance as portable. This should be used for the surface water, springs and oasis. At least locals learned using such basic tool. Since it is impossible to establish proper laboratory in soum settlements, this was the initiative at soum level.</p>	<p>The evaluation team maintains their position that the water quality laboratories provide limited value. Establishing laboratories at the soum level is unnecessary; rather focus should be placed on regular disinfection of water supply networks and analysis of representative samples at Aimag Inspectorate laboratories. For surface water, springs, and oases, the main concern with respect to drinking water quality is microbial contamination, which cannot be tested using the delivered portable laboratories.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, Residential Buildings</p> <p>Good comments for future JP. This was not in the project scope as well as UNDP supports the government but not individuals with such heavy investment required activities. Private connections should be provided where possible for people who can afford to pay little more in the future.</p>	<p>The evaluation team concurs with this comment, and will move the recommendation to the overall recommendations (Section 8).</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key</p>	<p>Typically, water supply planning for public</p>

Comment	Response by Evaluation Team
<p>Shortcomings and Recommendations, Residential Buildings</p> <p>I think this part belongs to Objective 2 and 3. Under JP, the DDDC developed with such standard life safety features. But UNDP did not construct indoor facilities.</p>	<p>buildings includes life safety criteria, such as fire water storage, flow, pressure, etc. The comment is not referring to indoor facilities.</p>
<p>UNDP. Section 4.1. Water and Sanitation, Key Shortcomings and Recommendations, Waste Management</p> <p>Please see, Output 1.2. This is in the scope.</p> <p>This sounds bit harder. There are also other factors should be considered, whether the locals are knowledgeable or skilled for applying such equipment. For example, an interviewee has broken the tip of the machine and having difficulties to apply. Please consider that beneficiaries are not being responsible or lacks ownership mind-set</p>	<p>The subject section has been reworded.</p>
<p>UNICEF. Section 4.1. Water and Sanitation. Accomplishments</p> <p>During the consultant’s visit 80% work completed. As of now, 100% work completed.</p>	<p>The information provided is added to the report.</p>
<p>UNICEF. Section 4.1. Water and Sanitation, Shortcomings and Recommendations</p> <p>Bulgan Soum: water supply for school buildings was not part of the UNICEF project scope.</p>	<p>The information provided is added to the report.</p>
<p>UNICEF. Section 4.1. Water and Sanitation, Shortcomings and Recommendations</p> <p>We suggest to reframe the wording such as “unrealistic cost estimate that are included in the project proposal are indicated below”</p>	<p>The phrase is reworded as follows: Some examples of unrealistic cost estimates and timeframes that are included in the approved project proposal are indicated below.</p>
<p>UNICEF. Section 4.1. Water and Sanitation, Shortcomings and Recommendations, Limited Joint Programming</p> <p>Under the Section IX (2) of the project proposal, it is clearly stated the Fund Management Modality. It says “..each organization will manage its own activities within the common workplan and the related budget.... “accounting is managed by each UN</p>	<p>As part of the evaluation, team assessed the comparative advantage of joint programming. For the water and sanitation activities, there were overlapping objectives among UNDP, UNICEF, and WHO, and in our opinion, it would have made more sense to use joint procurement, supervision, etc. This might have improved efficiency, but also might have resulted in better coverage of water supply</p>

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<p>organizations in accordance with its financial regulations and rules”.</p> <p>To me it is not the “implementation issue”. All the organizations followed the project proposal and implemented the project activities. Therefore joint programming specially procurement and construction works were not done.</p>	<p>and sanitation by the time the project closed.</p> <p>The statement is amended as follows:</p> <p>... but there was limited joint programming integrated into the agreed implementation modality.</p>
<p>UNICEF. Section 4.1. Water and Sanitation, Shortcomings and Recommendations, Recommendation 1.3</p> <p>Disagree. It is not in line with the project proposal. This can be a recommendation for the future JP.</p>	<p>The recommendation is reworded as follows:</p> <p>For similar interventions, joint procurement, construction, coordination, and supervision should be considered for complementary activities among JP partners, such as water and sanitation, in order to improve both efficiency and effectiveness.</p>
<p>UNICEF. Section 4.1. Water and Sanitation, Shortcomings and Recommendations, Water Quality Testing</p> <p>UNICEF assisted drilling well report includes water quality testing report which included</p> <ol style="list-style-type: none"> 1. Hardness 2. Ca 3. Mg 4. CL 5. Fe 6. NO2 7. NO3 8. Hg 9. pH 10. Colour, taste and odour <p>The reports of the wells are available if needed</p>	<p>The evaluation team maintains their conclusion that constructed water supply sources were insufficiently tested. The information provided is added to the report.</p> <p>For the drinking water supply wells supported by UNICEF, the contractors arranged testing for the following parameters: hardness, calcium, magnesium, chloride, iron, nitrite, nitrate, mercury, pH, and colour/taste/door. This information is documented on the well passports.</p> <p>Also, Recommendation 1.8 is amended as follows:</p> <p>Constructed and/or upgraded sources of water should be tested for minimum, health-based drinking water quality parameters, including arsenic, barium, boron, chromium, fluoride, and selenium, as well as reference microbial parameters (based on local conditions).</p>
<p>WHO. Section 4.3. Objective 3: Primary Health Care, Project Strengths and Accomplishments</p> <p>The WHO provided additional evidence regarding Water Safety Plan activities.</p>	<p>Based upon further evidence provided, the following is added under Project Strengths and Accomplishments:</p> <p>The WHO supported development of water safety plans in each of the six target soums through capacity building trainings and field consultation. Local Water Safety Plan teams were established, with broad coverage of</p>

Comment	Response by Evaluation Team
	involvement by local stakeholders. The plan and programme covered activities/measures for preparedness and adaptation on climate change.
<p>WHO. Section 4.3. Objective 3: Primary Health Care, Shortcomings and Recommendations, Health Care Waste Management</p> <p>The WHO provided further evidence of the equipment and procedures provided to local health care facilities for sterilizing and disposing health care wastes.</p>	<p>Based upon further evidence provided by WHO, this issue is reworded as follows: Local health care waste management not coordinated at the local level</p> <p>The WHO provided both equipment and best practice training to local health care facility managers on how to safely disinfect and dispose health care wastes. The sterilized wastes, including sharps, are packaged into boxes and buried in a designated pit at the community waste dumps. The evaluation team observed one of these waste dumps, in Bulgan, and there was no control in place by local authorities. The best practice promoted by the project requires ownership of the local soum authorities, to ensure that the procedures are maintained. No evidence was available demonstrating that the local authorities assume responsibility of the disposed health care wastes.</p> <p><u>Recommendation</u>. Remains unchanged.</p>
<p>UNFPA. Section 4.5. Objective 5: Public Outreach, Shortcomings and Recommendations</p> <p>Comparison of allocated budget to outputs: were the financial resources allocated to each output enough to achieve the output? The evaluators noted a shortage of financial resources in some parts, e.g. well construction etc. but not in all. For output, UNFPA was responsible for, only 24K for the duration of the project was budgeted and the evaluation says that the local stakeholders' understanding on human security was not enhanced. I believe, resources were not sufficient to achieve the target.</p>	<p>The evaluation team concurs that the budget for this objective was limited.</p> <p>The following statement is added under "recommendation": As a recommendation for similar interventions, public outreach at the local level could be enhanced through the engagement of social mobilizers, and these efforts should be incorporated as part of project coordination, not only as a separate line item.</p>
<p>UNFPA. Section 4.5. Objective 5 Public Outreach, Shortcomings and Recommendations</p>	<p>The evaluation team concurs with the comment.</p> <p>The statement is modified as follows:</p>

Comment	Response by Evaluation Team
<p>This contradicts with the statement above for the accomplishments. There, it is mentioned that UNFPA conducted trainings to the local communities of 6 soums. Also, I'm sure that annual progress reports clearly describe these trainings as well as follow-up activities implemented by participated community members. Therefore, this sentence does not capture the reality.</p>	<p>There was no evidence available (e.g., through impact assessment, knowledge retention, etc.) showing the effectiveness of HS training for local community member trainers.</p>
<p>UNDP. Section 5. Programme Management and Coordination Please consider this statement which supports the design rate change</p>	<p>Please note that the <u>Design</u> level ratings are provided only for "relevance".</p>
<p>UNICEF. Section 5. Programme Management and Coordination Under the Section IX (2) of the project proposal, it is clearly stated the Fund Management Modality. It says "...each organization will manage its own activities within the common workplan and the related budget.... "accounting is managed by each UN organizations in accordance with its financial regulations and rules". All the organizations followed the project proposal and implemented the project activities. Therefore joint programming specially procurement and construction works were not done. To me it is not the "implementation issue", it is the project design issue.</p>	<p>The evaluation team is aware of the information indicated. The section contains the following statement: In the opinion of the evaluation team, the inefficiencies of joint programming were mostly associated with how the programme was designed. No changes are made in response to this comment.</p>
<p>UNICEF. Section 5. Programme Management and Coordination, regarding no water supply for 2 of the 6 target soums. Disagree. This was not communication issue. UNICEF and UNDP project team closely worked to solve the problems related to water supply. For Bayan Gobi soum and Tsogt-Ovoo UNDP prepared the centralized water supply and sewage design and provided to the local government. UNICEF discussed with the local government for ensuring the connection of water supply. Although the local government has agreed to make connection of water</p>	<p>The evaluation team takes this information into account. However, school children are some of the most vulnerable members of the soum communities, and providing water supply was one of the main targets of the project. Notwithstanding the shortage of both government and JP funding, the evaluation team considers the fact that 2 of the soums remain without water supply at the end of the project should have been brought up early in the process to the Steering Committee, and possibilities of re-allocating available resources evaluated. We did not find</p>

Comment	Response by Evaluation Team
<p>supply to the school, this has not happened yet due to shortage of government funding.</p>	<p>evidence that such early warnings were raised. The statement is reworded as follows: At the end of the project, there is no water supply for school buildings in 2 of the 6 target soums. No evidence was found that early warnings were raised to the Steering Committee to evaluate possibilities of re-allocating JP resources to that these vulnerable groups could be provided with water supply.</p>
<p>WHO. Section 6. Human Security Impact Assessment, Health Security issue regarding final disposal of health care wastes. Based upon the evidence provided by the WHO regarding the equipment and procedures for safe treatment and disposal of health care wastes, they concluded that “there are no risks of sharps at community waste disposal site of the target soums”.</p>	<p>The evaluation team feels that safe disposal of health care wastes requires coordination between the health care facility managers and soum authorities, as well as controls in place at the disposal facility. Without resolving these issues, risks to the community cannot be excluded. The term “fully resolved” is replaced with the term “better coordinated”.</p>
<p>UNICEF. Section 7.3. Effectiveness, regarding quality of indoor WASH works. This was observed only one out of five indoor WASH facilities and therefore this can’t be generalized. Disagree on generalization.</p>	<p>The statement is reworded as follows: ... and the evaluation team leader observed poor construction quality of the indoor WASH facilities in the school buildings at the Bayangobi soum.</p>