



World Food Programme
Programme Alimentaire Mondial
Programa Mundial de Alimentos
برنامج الأغذية العالمي

SAVING
LIVES
CHANGING
LIVES

**Integrated climate risk management for strengthened resilience to climate change in Buner
and Shangla Districts of Khyber Pakhtunkhwa Province, Pakistan**

Annex 18 – Beneficiary Estimation Methodology

DESCRIPTION OF METHODOLOGY FOR ESTIMATING PROJECT BENEFICIARIES

Approach

Buner and Shangla Districts in Khyber Pakhtunkhwa were chosen strategically based on a thorough targeting and prioritization process. Initially, vulnerable districts were selected considering their susceptibility to floods and the prevalence of food insecurity and malnutrition. Through consultations and the application of vulnerability criteria, Buner and Shangla were identified as priority districts, notably due to the lack of recent climate change interventions, especially GCF-funded projects.

In the next phase, union councils within these districts were prioritized using criteria such as disaster risk, irrigation availability, livestock conditions, and the socio-economic impact of COVID-19.

A scoring system was used to rank union councils, with higher scores indicating greater vulnerability. Following discussions with Deputy Commissioners and security considerations, specific union councils were chosen for project implementation, with additional councils serving as backups. This targeted and prioritized approach ensures that the project focuses on the most vulnerable areas, maximizing its impact on enhancing resilience to climate change in the region. Similarly, for indirect and direct beneficiaries are calculated output wise based on the population directly taking benefit from the project activities as well indirectly tier 02 beneficiaries as indirect one.

Estimation of beneficiaries for Core and Supplementary Indicators

| Core indicator 2 | Direct and indirect beneficiaries reached |
|------------------|--|
| Unit | Number of individuals (female/male) |
| Definition | <p><u>Direct Beneficiaries:</u> Comprise the total population of the four priority union councils.</p> <p>Indirect Beneficiaries: Include the total population of Buner and Shangla districts.</p> <p><u>Adaptation benefit:</u></p> <ul style="list-style-type: none">-Increased climate resilience through local adaptation plans and diversified livelihoods- Local adaptation plans co-developed and prioritized community adaptation actions implemented |
| Disaggregation | <ul style="list-style-type: none">• By type of beneficiary – direct or indirect and by sex <p><u>Direct beneficiaries:</u></p> |

| | |
|-------------|---|
| | 146737, (73,898 men, 72,839 women) <u>Indirect beneficiaries: Bureau of statistics data 2023</u> 1,478,663 (705,334 men, 771,329 women) |
| Methodology | <p><u>Calculation:</u> <u>Direct Beneficiaries:</u> Population estimates for 2023 based on the population and housing census 2017 and growth rate projected for 2023.</p> <p>Indirect Beneficiaries: Population of Buner and Shangla taking benefits from adaptation activities, including local adaptation plans.</p> <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> • 30% of the beneficiaries will be reached at mid-term due to initial preparatory phase of planning, need identification, technical assessment, initial stakeholder engagements (Multilevel from federal to districts etc • Its assumed that field access / No objection certificates NOCs (no objection certificates) due security and unforeseen factors remain stable. • Procurement process may take longer than anticipated due international procurement and even for local purchases. |

| Supplementary indicator 2.1 | Beneficiaries (female/male) adopting improved and/or new climate resilient livelihood options |
|-----------------------------|--|
| Unit | Number of individuals (female/male) |
| Definition | <p>Refer to the number of people benefitting from the implementation of prioritized adaptation actions.</p> <p><u>Adaptation benefit:</u></p> <ul style="list-style-type: none"> -Increases in soil moisture reserves during unseasonal drought periods, associated with increased organic matter content - Reduction of soil disturbance and maintenance of cover reduces runoff and erosive losses during increasingly intense extreme rainfall events - Removes excess water during plant growth, reduces soil erosion and prevents the development of fungal diseases. - Efficient drainage systems control excess soil water and accumulation of excess salts in the crop's root zone. - Decreases the prevalence of important water-related diseases that affect human, plant and animal health. - Organic matter applications improve soil structure and avoid soil compaction. - Increase soil fertility as each crop has different nutrient requirements and plant-soil dynamics. - Increase crop yields with the diverse nutrient availability |

| | |
|----------------|--|
| | <ul style="list-style-type: none"> - Reduce soil erosion and prevent nutrients from being washed away by wind or water (through an increase in crop cover). - Water conservation - Soil conservation - Reforestation of sloped watersheds - Minimal soil disturbance - Weed management - Decrease soil erosion and prevent nutrients from being washed away by wind or water - Conservation and reforestation measures - Enhance the water retention capacity to ensure continuous access to clean water - Mitigate flood flow in event of excess rain - Enhance soil-water retention capacity needed as a preparatory action for tree planting. - Enhance community and household livelihoods via the generation of additional income and the supply of local produce at lower costs. |
| Disaggregation | <ul style="list-style-type: none"> • By type of beneficiary – direct or indirect and by sex <p><u>Direct Beneficiaries:</u> ~5,600, Participants with 30% women engagement, who will be directly involved in the activities</p> <p><u>Indirect beneficiaries:</u> ~ 50,400 (5,600x 9 People are the family members associated with the direct beneficiaries (52% women and 48% men, source “ BOS guidelines 2023 ”)</p> |
| Methodology | <p><u>Calculation:</u> Counting the number of beneficiaries who have received GCF-funded support and are applying improved or new livelihood options. The improved and/or new climate-resilient livelihood options include climate-resilient agricultural practices, and alternative livelihood activities such as:</p> <ul style="list-style-type: none"> - Conservation Agriculture Techniques - Field dredging - Crop rotation - Rehabilitation and transformation of gullies - Stone pitching and improvement of water reservoir - Eyebrow basins, trench bunds and small herring- bone basins - Creation of additional vegetable gardens/orchards at household / community levels <p>Each beneficiary should be counted only once unless a same individual adopted more than one improved or new climate-resilient livelihoods options.</p> <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> - 30% of the beneficiaries will be reached at mid-term due to initial preparatory phase of planning, need identification, technical assessment, initial stakeholder engagements (Multilevel from federal to districts etc |

| | |
|--|---|
| | <ul style="list-style-type: none"> - Technical assistance for climate-resilient livelihood practices and strategies - Technical trainings of the participants. - Strengthen and formalize existing community governance structures through capacity development <p>Design and installation/rehabilitation of climate resilient and gender friendly water and flood protection communal small-scale infrastructure.</p> |
|--|---|

| Supplementary indicator 2.4 | Beneficiaries (female/male) covered by new or improved early warning systems |
|-----------------------------|---|
| Unit | Number of individuals (female/male) |
| Definition | <p><u>Direct beneficiaries:</u> number of people receiving new/improved EW information through channels with a list of recipients (SMS, email, radio listening groups).</p> <p><u>Indirect beneficiaries:</u> Reflect the coverage of wide broadcasting systems disseminating new/improved EW information (radio, TV, newspaper).</p> <p><u>Adaptation benefit:</u></p> <ul style="list-style-type: none"> - Awareness in the community - Prepositioning - Protect lives and livelihood - Evacuation plan |
| Disaggregation | <ul style="list-style-type: none"> • By type of beneficiary – direct or indirect and by sex • <u>Direct beneficiaries:</u> 146,737 (73,898men, 72,839 women) Indirect beneficiaries: Bureau of statistics data 2023 1,478,663 (705,334 men,771,329 women) |
| Methodology | <p><u>Calculation:</u></p> <ul style="list-style-type: none"> • Direct beneficiaries considered in the counting methodology refer to the number of people receiving new/improved EW information through channels with a list of recipients (SMS, email, radio listening groups). This number will be multiplied by the average number of people per household. • Indirect beneficiaries: Overlaps in the counting of recipients in the different channels to be considered and ensure do not exceed population of the area. <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> -Hydromet monitoring, forecasting, and early-warning capability strengthened -Early-warning system strengthened |

- Anticipatory action system developed at provincial level

The table below provides a breakdown of the beneficiaries for the relevant project outputs:

| Project Output | Direct Beneficiaries | | | | Indirect Beneficiaries | | | | Total Beneficiaries |
|---------------------------|----------------------|--------|--------|------------------|------------------------|---------|---------|------------------|---------------------|
| | Total | Male | Female | Total per Output | Total | Male | Female | Total per Output | |
| Output 1.1 and 1.2 | 146,737 | 72,839 | 73,898 | 146,737 | 1,476,663 | 705,334 | 771,329 | 1,476,443 | 1,623,400 |
| Output 2 (core Indicator) | 146,737 | 72,839 | 73,898 | 146,737 | 1,476,663 | 705,334 | 771,329 | 1,476,443 | 1,623,400 |
| Output 2 (indicator 2.1) | 5,600 | 3,930 | 1,680 | 5,600 | 50,400 | 24,192 | 26,208 | 50,400 | 56,000 |
| Output 3 | 146,737 | 72,839 | 73,898 | 146,737 | 1,476,663 | 705,334 | 771,329 | 1,476,443 | 1,623,400 |

- Output 1.1 and 1.2: Capacity for flood risk modelling, impact-based forecasting, and anticipatory action strengthened. Output 1.2 only has the identical indirect beneficiaries as it is institutionalization, not implementation
- Output 2: Local adaptation plans co-developed and prioritized community adaptation actions implemented.
- Output 2 (indicator 2.1) : Beneficiaries directly participated in adaptation activities
- Output 3: Knowledge and lessons learned captured and disseminated to facilitate replication and upscaling