

## Cover Page for Project/Program Approval Request

<b>1. Country/Region:</b>	NEPAL	<b>2. CIF Project ID#:</b>	XPCRNP025A
<b>3. Source of Funding:</b>	<input type="checkbox"/> FIP	<input checked="" type="checkbox"/> PPCR	<input type="checkbox"/> SREP
<b>4. Project/Program Title:</b>	Building Climate Resilience of Watersheds in Mountain Eco-Regions		
<b>5. Type of CIF Investment:</b>	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Private	<input type="checkbox"/> Mixed
<b>6. Funding Request in million USD equivalent:</b>	<i>Grant:</i> \$23.537		<i>Non-Grant:</i>
<b>7. Implementing MDB(s):</b>	Asian Development Bank (ADB)		
<b>8. National Implementing Agency:</b>	Department of Soil Conservation and Watershed Management		
<b>9. MDB Focal Point and Project/Program Task Team Leader (TTL):</b>	<i>Headquarters- Focal Point:</i> Dr. Charles Rodgers, Regional and Sustainable Development Department	<i>TTL:</i> Ms. Cindy Malvicini, South Asia Department	
<b>10. Project/Program Description (including objectives and expected outcomes):</b>			
<p>The project aims to provide access to more reliable water resources for domestic purposes and irrigation for communities living in the watersheds of Nepal river systems which are significantly vulnerable to climate change. The watersheds selected lie in 6 districts in Far Western Development Region: Achham, Baitaidi, Bajhang, Bajura, Dadeldhura and Doti. Access and reliability to water resources will be improved through a participatory program of integrated watershed management with interventions in upland areas to increase surface water storage and groundwater recharge. Approximately 35,000 households are expected to benefit from improved water supply during the dry season to support domestic and agricultural uses. The spring or surface water sources are expected to become more reliable; the dry season water yield will either remain the same or increase.</p> <p>During preparation of the SPCR, a climate change risk assessment was carried out at the sectoral, district, and community levels to identify major risks. The most critical risks in Nepal are (i) quantity and quality of water, (ii) food security, and (iii) ecosystem health. While many of the specific, projected impacts on Nepal's water resources are still uncertain, an overall impact will be reduced reliability of water supplies relative to historical experience. The problem of too little or unreliable water is being addressed through this project. Communities observe that the yield of their traditional water sources in the hills and mountains (springs and streams) is declining, especially during the long dry season. Annual precipitation in the project area ranges from 743 millimeters (mm) to 3,351 mm under current climate conditions, but about 75% of the rain falls within a 3–4 month monsoon season. Extensive consultations during SPCR preparation concluded that communities living in the hills and mountains need support to rehabilitate their watersheds and improve the yield of their water sources.</p>			

Global climate model downscaled projections for Nepal<sup>1</sup> for 2030 to 2061 were analyzed for the sub-basin during project design. Temperature rise is projected to affect the hydrological cycle, which in turn will have an impact on water availability, runoff and the discharge regime of rivers. In general, climate change projections show that precipitation will slightly increase in the West Seti sub-basin. Precipitation will increase in pre-monsoon months and decrease in the monsoon, whereas a mixed trend (both increasing and decreasing) is projected in the project sub-watersheds in the winter and post-monsoon. Both increasing and decreasing tendencies in annual water yield and actual evapotranspiration are projected. In general, climate change projections show that annual river flow volume will slightly decrease. However, it is difficult to make conclusions regarding precipitation and flow trends. Uncertainty is the main risk that can be attributed to climate change. Another change reported was increasing intensity of rainfall, particularly during rain showers in the pre-monsoon period. This increased intensity would reduce the amount of infiltration and groundwater recharge. Development of storage facilities is an effective way to cope with temporal and spatial variability in water resources.<sup>2</sup>

Communities now recognize water resources are limited. They have expressed their commitment toward protecting and enhancing their water resources. The project will demonstrate ways to protect water sources while at the same time developing them for efficient use. The communities in the project area will have more reliable water supplies in the dry season. Major beneficiaries will be women and disadvantaged groups. The project will demonstrate participatory watershed management planning and build the capacity of all levels of the government for integrated watershed development specifically focusing on water resources. It is intended that lessons learned will also inform the design of traditional rural water supply and irrigation projects. The design and monitoring framework is in Appendix 1 of the *Report and Recommendation of the President to the Board of Directors*.

#### **11. Consistency with Investment Criteria:**

The project will pilot a new and more comprehensive approach to community water resources management and demonstrate ways to integrate climate change risk resilience into the planning of water supply and irrigation projects. Catchment improvement measures will help to stabilize or enhance the yield of water sources. Water storage will help sustain the use of limited water during the dry season, thereby reducing the time people (especially women) spend collecting water, and increasing irrigated agricultural area.

The project will strengthen capacity of national agencies working in watershed management, water supply, and irrigated agriculture to integrate climate resilience into their development planning. It is intended that lessons learned will inform the design of traditional rural water supply and irrigation projects, and that future water supply and irrigation projects supported by the Government and development partners will include watershed management in their designs. The project includes a strong knowledge management component that ensures documentation and reflection on lessons learned, and sharing of knowledge at both the national and global levels.

<sup>1</sup> Through ADB support in 2011-2012 the Asian Disaster Preparedness Center downscaled five Global Circulation Models for Nepal using three different Regional Circulation Models. Reports have been posted on the Department of Hydrology and Meteorology's Web Portal.

<sup>2</sup> International Water Management Institute. 2013. *The Assessment and Management of Water Resources under Current and Future Climate Conditions in the West Seti Sub-basin, Nepal (Draft)*. Kathmandu.

## 12. Stakeholder engagement:

During project preparation, the Department of Soil Conservation and Watershed Management (DSCWM) facilitated a technical working group (TWG) that met regularly to review findings from the technical assistance teams and determine the project area and detailed scope of the investment project. The TWG comprised representatives from the Ministry of Forests and Soil Conservation; Ministry of Environment, Science and Technology; Ministry of Federal Affairs and Local Development; departments of agriculture, forestry, irrigation and water supply; REDD and climate change adaptation cells; and associations of local government units. The project preparatory technical assistance team and DSCWM also convened numerous stakeholder consultations at the district and community levels within the project area. Multi-stakeholder workshops including NGOs and development partners were held thrice. Coordination with development partners was also achieved through meetings of the donor coordination group on climate change.

A detailed *Consultation, Participation, and Communications Plan*<sup>3</sup> has been prepared to guide stakeholder engagement during project implementation. The plan includes the activities to engage stakeholders at all levels, and the responsibilities of each implementing partner in participation and communication activities.

## 13. Gender considerations:

The project is characterized “effective gender mainstreaming.” Rural populations are considered to be most vulnerable to climate risks because of their dependence on natural resources and subsistence agriculture for their livelihoods. Droughts and degraded ecosystem health that may be exacerbated under climate change affect the availability of fuel wood, fodder, grasses and drinking water and the burden of collecting these usually falls on women. The project’s *Gender Equity and Social Inclusion (GESI) Plan*<sup>4</sup> is based on the findings of the poverty and social analysis including the gender analysis and focuses on two significant discriminations and vulnerabilities. The plan aims to leverage opportunities provided by changing socio-economic conditions and the proposed interventions of the project to address these vulnerabilities. It lists necessary actions to encourage women and disadvantaged groups in the project area to participate in planning and implementing project activities, and specifies actions to monitor project effects on women and disadvantaged groups.

- (i) In the project area tradition dictates that the Dalit will not touch drinking/domestic water sources directly when sharing these with the higher castes. The Dalit must stand back and wait while the higher castes, Chettri and Brahman (the other two groups they co-habit the project watersheds with) use the water, and until one of the higher castes pours water into the Dalit’s vessel. The Dalit cannot use running water at the source to wash clothes, utensils or their bodies when sharing the source with the higher caste but are required to carry it away before they can use it. This increases the quantities of water they have to carry. While untouchability has greatly declined in the official state-managed public sphere, due diligence is still needed to secure equitable access for the Dalit.
- (ii) Women are the custodian of the household, the children and the elderly, and also tend to the livestock. In the project area women carry heavy loads of fire wood, and tree leaf fodder over long distances. These distances and the time it takes to complete these tasks are getting longer in a changing climate regime. Filling and carrying substantial quantities of water for drinking and domestic uses is a prominent part of their work load. Women do not inherit land (it remains within the male line) and are subjected to discriminatory

<sup>3</sup> Linked document number 10.

<sup>4</sup> Linked document number 9.

prescriptions such as leaving their homes and moving to quarters separated from the main settlement during menstruation and several days after child birth. Yet, these prescriptions do not provide respite from their every day drudgery at vulnerable moments; women are expected to carry on with their laborious outside chores.

- (iii) The out-migration of men for employment increases the labor load and responsibility of the women. Although raising their vulnerability, out-migration of men also accords women the de-facto head of the household status but without alleviating the male child preference or deference to patriarchal order. Similarly, the possibility of finding gainful employment elsewhere has released the Dalit from the economic bondage of the higher castes. This relatively raising the de facto status of individual Dalit in proportion to their economic well being, but without alleviating the inherent status and “purity” differential between castes.

A Gender and Social Development Specialist (international consultant engaged by the Nordic Development Fund) will be responsible to oversee implementation of the GESI Plan. S/he will be assisted by a national Senior Social Development and Monitoring and Evaluation Specialist. S/he will provide regular training and coaching to all project staff/consultants in GESI mainstreaming. At the subproject level, field technical teams will be responsible to ensure the active participation of women and other disadvantaged groups in subproject selection and public meetings, and ensure that the needs and priorities of women, poor and excluded will be given preference in the design of the schemes. The field technical teams will also be responsible for forming community development groups and ensuring that the community development group Committees have women and disadvantaged group representation in accordance with the GESI Plan. An NGO will be engaged to design and conduct a training program for subproject beneficiaries on soil and water conservation techniques. The NGO will ensure training programs are targeted to women and other disadvantaged groups. At the project level, the Gender and Social Development Specialist will ensure the technical and vocation training programs meet their GESI targets, and lead the production of knowledge products that specifically address GESI issues. More detail on knowledge management aspects may be found in the Summary Project/Program Approval Request under the heading “Other Information.”

**14. Indicators and Targets (consistent with results framework):**

Core Indicators	Target
<p><b>INDICATOR A1.3:</b> Numbers of people supported by the PPCR to cope with effects of climate change</p>	<p>35,000 households have access to improved domestic and irrigation water (baseline: 0)</p>
<p><b>INDICATOR A2.1:</b> Degree of integration of climate change in national, including sector planning</p>	<p>Lessons, including those derived from a gender and social inclusion perspective, fed into DSCWM, Department of Water Supply and Sewerage, and Department of Irrigation guidelines</p>
<p><b>INDICATOR B1:</b> Extent to which vulnerable households, communities businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to Climate Variability and Climate Change</p>	<p>Good practices in water and soil conservation that are responsive to the specific needs of women and disadvantaged groups are adopted by participating communities</p>

<p><b>INDICATOR B2:</b> Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience</p>	<p>New watershed planning approach adopted by 75% of trained DSCWM staff</p>	
<p><b>INDICATOR B5:</b> Quality of and extent to which climate responsive instruments/ investment models are developed and tested</p>	<p>12 new knowledge products are produced from project outcomes, 4 of which focus on gender and social inclusion</p> <p>Method to monitor project interventions on watershed hydrology developed and agreed by Government</p>	
<p><b>INDICATOR A1.4 (Optional):</b> Percentage of people with year round access to reliable and safe water supply (domestic, agricultural, industrial)</p>	<p>Domestic water collected during dry season increased by 50% (baseline: 8 liters/person/day)</p> <p>Time women and children spend collecting water during the dry season reduced by 75% (baseline: 3–8 hours/day/household)</p> <p>Yield of water sources (spring or surface water) remains stable or is increased</p> <p>Availability of irrigation water during dry season of at least 0.3 liters per second/hectare</p>	
<p><i>Development Indicator(s):</i></p>	<p>At least 33% female and proportional representation of disadvantaged groups in community development group committees; at least one woman is in a leadership role</p>	
<p><b>15. Co-Financing:</b></p>		
	<p><i>Amount (in USD million):</i></p>	<p><i>Type of contribution:</i></p>
<ul style="list-style-type: none"> <li>• Government</li> </ul>	<p>2.0</p>	<p>Cash and in-kind</p>
<ul style="list-style-type: none"> <li>• MDB</li> </ul>	<p>0</p>	
<ul style="list-style-type: none"> <li>• Private Sector (please specify)</li> </ul>	<p>0</p>	
<ul style="list-style-type: none"> <li>• Bilateral (please specify)</li> </ul>	<p>0</p>	
<ul style="list-style-type: none"> <li>• Others: Nordic Development Fund</li> </ul>	<p>4.6</p>	<p>Grant, parallel</p>
<p style="text-align: center;"><b>Co-Financing Total:</b></p>	<p>6.6</p>	
<p><b>16. Expected Board/MDB Management approval date:</b></p>		
<p>Nordic Development Fund financing was approved on 12 June 2013. The project is subject to ADB Board of Directors' approval. The expected date for ADB Board consideration is 30 September 2013.</p>		