## PROJECT INFORMATION DOCUMENT (PID)
### CONCEPT STAGE

Report No.: PIDC415

<table>
<thead>
<tr>
<th><strong>Project Name</strong></th>
<th>Uttarakhand Decentralized Watershed Development Project Phase II (P131235)</th>
</tr>
</thead>
<tbody>
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<td><strong>Region</strong></td>
<td>SOUTH ASIA</td>
</tr>
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<td><strong>Country</strong></td>
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<tr>
<td><strong>Sector(s)</strong></td>
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<td><strong>Lending Instrument</strong></td>
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<td><strong>Project ID</strong></td>
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<td><strong>Borrower(s)</strong></td>
<td>Department of Economic Affairs, Ministry of Finance, Government of India</td>
</tr>
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<td><strong>Implementing Agency</strong></td>
<td>Watershed Management Directorate (WMD)</td>
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<td><strong>Environmental Category</strong></td>
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<td><strong>Date PID Prepared</strong></td>
<td>02-Jan-2013</td>
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<td><strong>Estimated Date of Appraisal Completion</strong></td>
<td>18-Apr-2013</td>
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<tr>
<td><strong>Estimated Date of Board Approval</strong></td>
<td>15-Aug-2013</td>
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### I. Introduction and Context

#### Country Context

With high rates of investment and savings and strong export growth, India’s national Gross Domestic Product (GDP) grew at more than 6 -7 percent per annum over the recent past. The rapid growth generated substantial public and private resources for large investment and development programs with visible results as the country positions itself as an emerging middle income economy. At the same time, India faces formidable challenges ahead: more than 400 million people, i.e. twice the size of the population of Brazil, still live under US$1.25/day, with the majority living in rural areas and dependent on agriculture or other land-based resources. In turn, natural resources are being exploited at an increased rate to satisfy the population pressure and the demand of a growing economy. It was in this context watershed development tools are emerging as one of the key option for treating rainfed areas (about 50% of country’s arable land where conventional irrigation is highly capital intensive) and bringing them under agriculture production systems.

Approximately 93 percent of the total area of the state of Uttarakhand is mountainous, and 64 percent is covered by forest. Most of the northern part of the state is covered by high Himalayan
peaks and glaciers. The Himalayan ecosystem provides the habitat for threatened species including bharal, snow leopards, tigers, and rare herbs. Two of India’s largest rivers, the Ganges and the Yamuna, originate from Uttarakhand. The catchments of these two perennial rivers are getting eroded over the years. In absence of catchment treatment and watershed development programs in the basins and sub-basins, it has led to increased silt deposits and has reduced the discharge rate of not just these two mega rivers but also small streams springs which are the life line of the local communities. In addition, about 80% of the state arable land is rainfed. The proposed project is well placed in terms of developing rainfed agriculture using watershed development tool in those degraded catchment.

An insight into the rainfed regions reveals a grim picture of poverty, water scarcity, rapid depletion of ground water table and fragile ecosystem. Land degradation due to soil erosion by wind and water, low rainwater use efficiency, high population pressure, acute fodder shortage, poor livestock productivity, under investment in water use efficiency, lack of assured and remunerative marketing opportunities and poor infrastructure are important concerns of enabling policies. The challenge in rainfed areas, therefore, is to improve rural livelihoods through participatory watershed development with focus on integrated farming system for enhancing income, productivity and livelihood security in a sustainable manner.

Sectoral and Institutional Context
It was only nine years ago that Uttarakhand obtained its autonomy as a state, which meant that the mountain economy was to a certain degree, neglected. Presently, Uttarakhand as a state is producing much less food (including produce from the plains, hill and mountains combined) than is required for feeding its population. In 2008 the production of main cereal and other crops (millets) was calculated at 200 kg per person per annum that is adequate only to meet a maximum of six and a half months of food requirement. Similarly, in the case of other essential food items, it grows 3 kg oil seeds (one kg. oil), 4.5 kg pulses, 83 kg fruits and 79 kg vegetables per capita annually, which is only enough to meet one person’s requirement of 45 days each of oil and pulses, 323 days of fruits and 158 days of vegetables in a year. This data does not separate hill and mountain agriculture produce from the main produce of the state which is largely produced in the two plains districts of Haridwar and Udham Singh Nagar and in the plain parts of district Dehradun and Nainital. In addition, the state is affected by a series of natural disasters particularly flash floods over the last three years. Given that 80% of the area is rainfed, watershed treatment for rainfed agriculture development is an imperative for the state.

The Government of Uttarakhand is committed to watershed development as a means of poverty alleviation in the hills and the state has implemented several interventions to support the restoration and conservation of natural resources, sustainable agriculture, and rural livelihoods. The approach is supported by the Government of India. The International Development Association (expand acronym)funded Uttarakhand Decentralized Watershed Development Project I – also known as Gramya – supported sustainable agricultural production and rural livelihoods in the hills by enhancing natural resource management and by strengthening the Gram Panchayat (GPs) capacity to plan and manage resources. Gramya I was a follow-on project to the IDA-financed multi-state Integrated Watershed Development Project II (IWDPII). Both projects were implemented by the Watershed Management Directorate (WMD), multi-sectoral agency under the Forest Department. At a total cost of US$77.6 million, Gramya I treated 234,800 ha across 76 micro-watersheds by engaging 468 GPs. In the seven years of implementation, the project met or exceeded all of its
targets, providing water resources to large tracts of rainfed agriculture land. Some of the key results in project areas include:

a) With active community participation and water conservation techniques, there has been an increase in the average water discharge rate from 5-8 lpm (expand in first ref) at the start of the project to about 18 lpm at its end, providing renewable water for irrigation and domestic use;
b) Increase in the gross irrigation potential of 11,609 ha by converting about 13.3 percent of state’s rainfed areas into irrigated areas;
c) Enhancement of the productive potential of natural resources in project areas through catchment treatment and forestry activities, with an additional 16,363 ha is brought under plantation;
d) Introduction of high value vegetable crops through demonstrations and improvement of the production potential to level comparable to other progressive agriculture dominated states of India;
e) Establishment of 27 agri-business federations with forward market linkages. These federations have undertaken about Rs. 43 Crores (about $9.5 millions) per year of transactions. These federations are well positioned to become agri-business producer companies;
f) Development of a business model of participatory and inclusive approach in watershed management, supporting income generation activities for vulnerable groups;
g) Building of substantial administrative capacity of Panchat Raj Institutions (PRIs), including financial and natural resource management; and
h) Assistance to the State in introducing regulatory reform with the State Forest Department issuing a government order to allow water user groups and Van Panchayat members to work in Reserve Forest lands within the watershed catchment, the first of its kind in the history of India.

In 2009, GoUK developed a Perspective and Strategic Plan 2009-2027, which is to scale up the participatory watershed development model developed by Gramya I to other programs, such as the Government of India financed Integrated Watershed Management Program (IWMP), implemented by the Ministry of Rural Development (MoRD). Common Guidelines were developed, and the State plans to treat 537 micro-watersheds in the hills, comprising of about 1,900,000 ha by 2027.

Relationship to CAS
The proposed project (for identification purpose, it will be referred to as Gramya II) aims at continuing to support the government goals by scaling up and expanding the areas of interventions under the Gramya I. This is consistent with the India Country Strategy (CAS) FY2009-2012 as well as the Bank’s Water and Agriculture Sector Strategy (2003). The Government of India (GoI) classifies Uttarakhand as one of Special Category States, which are mainly in the hills and indicates that Uttarakhand faces challenging issues on the management of natural resources, particularly water and watershed development activities for ensuring access to water to the community for irrigation as well as for domestic use.

The proposed participatory approach towards developing and implementing watershed development plans at the village level will also align Gramya II with the three CAS objectives of (a) achieving rapid, inclusive growth, (b) ensuring that development is sustainable, and (c) increasing the effectiveness of service delivery. The project is also consistent with GoUK’s rural poverty reduction strategy, which is based on continued administrative, fiscal and political decentralization to village local governments (GP’s) and promotion of participatory watershed management in hilly areas to increase agricultural productivity.
II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The Proposed Project Development Objectives would be to improve and sustain the productive potential of natural resources and rainfed agriculture, and to increase incomes of rural inhabitants in selected watersheds by effectively and efficiently consolidating a participatory watershed development model. This would be achieved by supporting the GoUK in consolidating the participatory watershed model developed under previous IDA supported interventions with an emphasis on strengthening the agri-business supply chain for high value agriculture production systems.

Key Results (From PCN)

The proposed project would be implemented in 8 districts of the state covering 2.8 lakh ha. These districts would be: Almora, Bageswar, Dehradun, Pauri, Pithoragarh, Rudra Prayag, Tehri and Uttarkashi districts.

The proposed PDO indicators would be as follows:

a) Overall 15 percent increase in household net income in Gramya II GPs (disaggregated by socio-economic group);

b) 10 percent increase in vegetation and biomass index of treated watersheds;

c) 15 percent increase in irrigated area in treated areas;

d) 15 percent increase in net value of produce realized by federation members (segregated by first and second phase farmers); and

e) 2,000 ha treated in IWMP target areas - using the Gramya II participatory watershed development model.

III. Preliminary Description

Concept Description

The proposed Gramya II will treat a total of 2.8 ha in the Mid-Himalaya region ranging from 700m to 2,500m above sea level. Based on the recent, survey, the project is likely to treat about 25 percent of the reserve forest areas available within the micro-catchments of the project selected GPs. These degraded reserve forest patched falls along the drainage line that will be treated as part of the watershed development. About 600 to 650 GPs in 20 to 22 developmental blocks will benefit from the project. The project area will be selected according to the Common Guidelines and will be contiguous to micro-watersheds treated by Gramya I to maximize impact by enhancing the natural resource base and enabling cross-learning among GPs.

The Gramya II will introduce innovative features in its design and consolidate some of the good lessons learned under the Gramya I These would include: (a) undertaking comprehensive watershed development in contiguous rainfed areas and ensuring long term sustainability with an area based rainfed development approach; (b) facilitating the same comprehensive watershed development approach in about 50 percent of the IWMP target areas; (c) scaling up a market-driven value chain development for high value vegetable crops; and (d) ensuring GP-level implementation of the two key regulatory reforms under the Gramya I, which would be catchment planning (allowing the reserve forest to be treated by the Watershed Directorate) and formation of Aam Sabha (the literal translation is General Body but if the group is only women so better to say “and the formation of women’s councils” without bringing in the confusing Hindi tag)) in watershed planning.
Project Components

In line with the GoUK Perspective and Strategic Plan 2009-2027, the proposed Project would have four components: (a) rainfed area development using participatory watershed development and management, (b) enhancing livelihood opportunities, (c) consolidation of Gramya I activities, and (d) institutional strengthening.

Component A. This component will support GPs in selected micro-watersheds in developing watershed development plans (WDPs), setting up user committees, and implementing WDPs. The project will provide technical assistance in mobilizing GPs, treating micro-watersheds, developing water harvest infrastructure, and improving technologies and practices in horticulture and livestock production. This will include improving seeds and breeds and introducing high value crops and cultivation techniques. While social mobilization and technical assistance will be provided by NGOs, relevant line departments (agriculture, horticulture, and animal husbandry), and the WMD (engineering), the project will also create a pool of community-based mobilizers, accountants, extension service providers, and para-vets at the village- or cluster-level.

Component B. Enhancing Livelihood Opportunities (US$ 20 million). The component will support (a) formation and capacity development of Common Interest Groups (CIGs) and their federations, (b) value chain development, including input supply, value addition and quality control in harvesting and post-harvest processing, and marketing, (c) marketing intelligence development and dissemination to farmers (by using IT), (d) innovation grant to facilitate partnership with private sector, and (e) income generation activities for vulnerable groups. NGOs will be hired to identify and train para-professionals in CIG mobilization, accounting and book keeping, value chain development, and marketing. The innovation grant will be managed by the WMD.

Component C. Consolidation of Gramya I activities (US$8 million). This component will support selected Gramya I GPs in biodiversity conservation in inter GP space and also support the consolidation of farmer federations by piloting the above community-driven CIG development. At the same time, the proposed project will enhance the federations’ capacity in production by engaging farmers with rainfed land and small landholders, and in post-harvest processing by engaging women and landless.

Component D. Institutional Strengthening (US$32 million). The component will finance project operation costs, including capacity building, monitoring and evaluation (M&E), communication, and knowledge management. The component will build GP and PRI capacity by implementing social accountability measures, such as social audit and grievance redressal mechanisms. The project will update the Gramya I communication strategy and develop targeted awareness messages about the project’s participatory and transparent approaches. It will also coordinate development of other messages, such as extension, marketing and quality control information, and food and nutrition security. The M&E will continue the geographic mapping of the project areas and implementation of participatory monitoring and evaluation (PME) at GP level and link with national M&E improvements through the proposed Neeranchal national watershed project. The component will also support knowledge management between GPs supported by Gramya II as well as IWMP and among the State stakeholders in watershed development. It will also finance an establishment of incentive fund to award best performing GPs in implementing their watershed development plans.
IV. Safeguard Policies that might apply

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VI. Contact point

**World Bank**

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