

**INTEGRATED SAFEGUARDS DATASHEET
APPRAISAL STAGE**

I. Basic Information

Date prepared/updated: 02/16/2006

Report No.: AC1530

1. Basic Project Data

Country: India	Project ID: P083187	
Project Name: Uttaranchal Rural Water Supply and Sanitation Project		
Task Team Leader: Midori Makino		
Estimated Appraisal Date: February 20, 2006	Estimated Board Date: May 23, 2006	
Managing Unit: SASEI	Lending Instrument: Sector Investment and Maintenance Loan	
Sector: Water supply (80%);Sanitation (20%)		
Theme: Rural services and infrastructure (P)		
IBRD Amount (US\$m.):	0.00	
IDA Amount (US\$m.):	120.00	
GEF Amount (US\$m.):	0.00	
PCF Amount (US\$m.):	0.00	
Other financing amounts by source:		
	<u>BORROWER/RECIPIENT</u>	154.00
		154.00
Environmental Category: B - Partial Assessment		
Simplified Processing	Simple <input type="checkbox"/>	Repeater <input type="checkbox"/>
Is this project processed under OP 8.50 (Emergency Recovery)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

2. Project Objectives

The project's development objective is to improve effectiveness of rural water supply and sanitation (RWSS) services under the control of Panchayati Raj Institutions (PRIs) and local communities in the state of Uttaranchal. The project is also expected to bring associated benefits, including improved health resulting in reduced water borne diseases, environmental sustainability through protection and management of water catchment areas, and well being of the rural population, especially women, through time savings in fetching water and community development activities.

3. Project Description

The proposed instrument is a Specific Investment Loan of \$120 million, which would finance about 44% of the SWAp basket expenditures for the next five years, identified under the state's medium term sector program (MTP). A SWAp has been chosen to implement a consistent policy for all new investments irrespective of the sources of financing. The financing partners that consist of IDA, Government of India (GOI), and Government of Uttaranchal (GoUA) will agree on their financial contribution to the program and rely on common rules and procedures adopted by GoUA to implement the program.

4. Project Location and salient physical characteristics relevant to the safeguard analysis

The State of Uttaranchal, situated centrally in the long sweep of Himalayas in north India, lies in two of its regions -- Garhwal (north-west portion) and Kumaon (south-east portion). The state presents a variety of physical and hydro-geological characteristics in terms of topography, altitude, rainfall and vegetation. The monsoon in the state commences after middle of June till mid September, providing four fifths of total rainfall. In high hills rainfall generally occurs throughout the year with some variations. The state's hill regions are well drained by numerous rivers and rivulets (locally known as gad, gadhera and raula). The state has three main river systems: i) the Bhagirathi-Alkananda-Ganga basin, ii) the Yamuna-Tons basin, and iii) the Kali system, which are important water resources not only for the state but also for the whole Gangetic plains of north India. In general these rivers make a steep descent in the first 10-20km of their descent, with a lesser gradient later. Streams and rivulets, both perennial and seasonal, which flow down almost in every fold of the mountain ridges, and springs which occur all over the mountain region, form the main source of water to rural communities, which do not have access to river valleys. The region, being located in unstable Himalayan hills and with different river systems, is prone for natural hazards such as earthquakes and flash floods. Thus, the state poses challenges for rural water supply and sanitation service provision.

5. Environmental and Social Safeguards Specialists

Ms Sonia Chand Sandhu (SASES)

Mr S. Satish (SASES)

Mr Ranjan Samantaray (SASES)

6. Safeguard Policies Triggered	Yes	No
Environmental Assessment (OP/BP 4.01)	X	
Natural Habitats (OP/BP 4.04)		X
Forests (OP/BP 4.36)	X	
Pest Management (OP 4.09)		X
Cultural Property (OPN 11.03)		X
Indigenous Peoples (OP/BP 4.10)		X
Involuntary Resettlement (OP/BP 4.12)		X
Safety of Dams (OP/BP 4.37)		X
Projects on International Waterways (OP/BP 7.50)		X
Projects in Disputed Areas (OP/BP 7.60)		X

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

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Environmental Assessment – OP/BP 4.01 - The project will support single and multiple village based rural water supply and sanitation schemes/services (RWSS), which will improve overall environmental conditions through expected improvement in quality of RWSS services. While there are several positive impacts expected under the project (improved hygiene practices, controlled discharge of human and domestic animal waste, reduction in faecal contamination and improvement in overall Infant Mortality rate (IMR) and Maternal Mortality Rate (MMR) the source sustainability (of springs and streams) has emerged as a major environmental challenge.

A comprehensive environmental assessment (EA) has been undertaken. This included an analysis of sector specific environmental issues, policy and institutional bottlenecks, lessons learned from past and ongoing projects and a focused case study on catchment area treatment. Incorporating the key environmental challenges identified under the EA, an EMF has been prepared. The EMF includes various environmental management strategies to be used during project implementation.. The EMF specifically indicates measures required to address and manage risks associated with the following critical environmental issues. :

(i) Source Sustainability - The state has around 34989.50 sq kms. of catchment area. These catchments' forest/biomass cover and its moisture retention capacity directly influence recharging capacity of the local aquifers. Most of the drinking water supply sources lie in these catchments. Considering that majority of the RWSS services are dependent upon spring and stream sources, its sustainability becomes critical for the project. Experience from past single/multiple village RWSS suggests that 15% of the sources have dried out and about 30% sources have significantly declined their source discharge rate over the recent past (as identified by the EA). Keeping this in mind, the project will ensure that a minimum of 5Ha of land around the source will be protected and necessary catchment treatment interventions will be undertaken as part of source sustainability measures under the project. Technical design and specifications have been finalized with the state government. Besides, the state government through the SWAP will ensure that the individual sub-project catchment will be treated on priority by the line departments.

(ii) Water Quality – While the chemical and heavy metal contamination is reported as insignificant in the state, the bacteriological contamination has been a problem, particularly with the increasing evidences of faecal coliform. Out of the 10 districts in the state few incidences of increasing nitrate in groundwater pockets were found in two indo-gangetic plain districts i.e., “Haridwar” and “Udhamsingh”. However, this cannot be generalized as a major concern in the state.

(iii) Environmental Sanitation – Open defecation, lack of hygiene practices and poor disposal of solid waste are some of the key attributing factors for the poor environmental sanitation condition in the state. Only 16% rural HHs have access to proper sanitation facilities and less than 2.2% of rural HHs have garbage/compost pits. Frequent flash floods and storm water also carry residues posing environmental risks for water storage of the piped water supply schemes. According to the EA study, cattle generate about 1600 kg dung/ village/day and most of the villagers do not have cattle sheds. Therefore, livestock residues are generally carried by run-off water polluting the downstream water sources. Most of this bacteriological contamination gets aggravated during monsoon periods.

(iv) Grazing and Fuelwood Pressure on the catchment - Livestock is the second source of income for the rural households (HHs) and an integral part of their livelihood system in the state. Stall-feeding is not yet a significant practice in the state. Each HH has an average of 4.19 livestock. There is a strong tradition in the districts of Uttaranchal of efficient fodder management by using a mix of tree, grass and shrub species. These three mixtures are essentially collected from the catchments, which are already degraded and provides water sources for the RWSS under the project.

Apart from the grazing pressure, the villagers are heavily dependent on catchment for fuelwood supply. According to the The EA , the existing fuelwood consumption is ten times higher than the state average biomass carrying capacity . Increasing demand of wood for fuel and heating in rural areas has substantially reduced the regeneration capacity of the community/reserve forest areas. Such degradations are neither supported by any catchment treatment measures (for regeneration of biomass base) nor are the rural communities supported with any alternative energy sources for fuel and heating.

Forestry OP 4.36: Most water sources are located in forest areas, considering that Uttaranchal is primarily a hill state with almost 65% land under forests. The project ensures detailed procedures for use of forest land per those specified by GOI. These are covered in detail in the section below under “water source”. The EMF provides for adequate management measures (during scheme implementation) to mitigate adverse impacts of any activity in these areas. The Forestry policy is triggered but the project supports the overall objective of the policy and has ensured that the design of the EMF is fully consistent with the policy.

Social: Social safeguard issues are discussed under two broad categories: one, land related; and the other, tribals, in the context of Operational Policy 4.10.

Land Availability/ Contribution:

Land requirement arises for four purposes: FOR (i) water source; (ii) water treatment plants; (iii) construction of ground level or overhead tanks (G/OHT) or cisterns; and (iv) water transmission and distribution pipelines as well as sillage/ storm water drains. Majority of land requirement will be met out of public/ forest lands. In a few cases, private lands will need to be secured. However, it is not essential that a particular piece of

land at a particular place is needed. Rather, lands can be chosen from a number of alternatives. The project's activity/ success does not depend upon having a particular piece of land. Thus, lands need not be acquired involuntarily and hence OP 4.12 is not triggered. Detailed procedure on securing lands are enumerated below.

Transmission / distribution as well as sillage/ storm drainage in the case of single village schemes, are laid mostly in public land or along public streets and no land needs to be acquired. In a few cases pipelines may have to pass through private agriculture fields. Since the pipeline are laid at least 90 cms below ground elevation, no land acquisition is needed, but permission from the land owner is taken. If such permission is not forthcoming, then alternative pipe routing is used, even if it is more expensive to do so. In a few cases, where sources are located in the forests, transmission lines may have to be drawn through the forest lands. In such a situation, procedure as described below will be adopted.

Water Source: Uttaranchal being a hilly state with about 65 % of lands under forests, majority of water sources are located in the forests. Government of India (GOI) as well as state government has well laid out rules and procedures for making use of forest lands for non-forest purposes. Key principle underpinning the land transactions are:

- (i) Gram Panchayat will make an application to the concerned Divisional Forest Officer (DFO) requesting lands specifying location and area required as well as purpose for which it will be used.
- (ii) DFO will examine and recommends to the state government which has powers to accord approval for lands up to one hectare and area beyond one hectare needs approval by GOI. Past experience of Swajal (Bank assisted) as well as other projects implemented by other sector institutions indicate that a majority of schemes may not require more than 0.3 Ha (single village schemes) and 0.8 Ha (multi-village schemes). This means, most approvals will be sought within the state.
- (iii) Land transfer will require fees to be paid towards lease amount, annual lease rent, and net present value (NPV), amounts will be determined by DFO. The state government recently has waived off lease amount and rent for drinking water projects. It may be noted that NPV is meant for compensatory afforestation elsewhere in lieu of forests given up for the project. NPV varies from location to location and will be calculated on the basis of not only area but also forest density. NPV normally varies between Rs 580,000 and Rs 10,00,000, average being Rs 750,000 per hectare. Project's requirement of lands being 0.3 to 0.8 Ha, sum required will be a maximum of Rs 225,000 to Rs 600,00,000.

GOHT & Treatment Plant: When plots of lands are to be acquired for project installations, their ownership could be either public or private. While it is easier to access public land, arrangements will have to be made for securing privately owned land. All land purchases will be voluntary by donations or market led sale-purchase transactions. This is being adopted as it is not mandatory that a particular piece of land alone will be required without which scheme cannot be grounded. In other words, the project's activity/ success does not depend upon having a particular piece of land.

Single Village Water Supply Schemes: The prevailing normal practice in the state is to obtain such land plots either through voluntary donation or by outright purchase. In the experience of the recently concluded Bank assisted project, there were about 10 % cases wherein communities secured lands by outright purchase. But, again, actual cash transactions were very few and most of them were based on a mutual understanding between the owner and the community. This practice is expected to continue for the proposed project too for single village water supply schemes.

Multi-Village Water Supply Schemes. In this case, the number of outright purchases with cash transaction could be higher. In these cases, responsibility of making available lands will rest with GPs/ VWSCs. Detailed principles underpinning securing lands are described below:

- (i) Project will not resort to involuntary land acquisition.
- (ii) To a large extent, as a first priority, efforts will be made to secure Public lands (lands belonging to revenue or other departments).
- (iii) In case, public lands are not available, then, private lands will be secured in the open market.
- (iv) Selection of Land. – All the three parties - GP, UWSSC and the respective state body – together will decide on the selection taking into account suitability from all perspectives.
- (v) Prices. A district level advisory committee headed by the Block Pramukh with broad base participation by other functionaries (Block Development Officer, Jr Engineer of the state sector agency, Gram Pradhan and Chairman of UWSSC) will involve in negotiations with prospective sellers and arrive at a negotiated price. This will be endorsed by DWSM.
- (vi) Right to Refusal. A seller will have a right to refuse to sell his/ her piece of land, if s/he so wishes, at any point of time, till that time sale transactions are completed.
- (vii) Thus, all (private) land transactions will meet the following criteria:
 - a. the land in question will be free of squatters, encroachers or other claims of encumbrances;
 - b. no lands will be secured which has semi/ permanent structures;
 - c. activity for which a specific land is chosen has the general acceptance by the local community (as endorsed by the GP through consultations);
 - d. verification of the voluntary nature of land sale purchase in each case -- independent monitoring and certification by SWSM;
 - e. due transparent measures for publicizing the rules of securing lands as well as the transactions thereof;
 - f. land transfers will be complete, land title will be vested with the (GP/ UWSSC);
 - g. no project activity will start unless payments are made and title transfer are completed;
 - h. provision will be made for redressal of grievances (ROG) PMU (SWSM) will act as a redressal house with an officer designated particularly for monitoring the land purchases.

(viii) Lands will not be secured from socially poor and vulnerable households (such as those belonging to Scheduled Castes/ Scheduled Tribes) who, after alienation, will be left with less than a minimum holding essential to support livelihood.

Tribal Development

Social Assessment Enquiry, based on detailed analysis of several aspects, has concluded that the tribals (scheduled tribes) in Uttarnachal can not be judged as socio-cultural groups with identities distinctly different from the other groups in the society. They are not among the most marginalized and vulnerable segments of the population. STs' have continuously participated in and derived benefits from several development interventions in the past and that, their social, economic and legal status are in fact, as good, if not better, than the other segments. Hence, there is no need to trigger the Bank's Operational Policy 4.10 related to indigenous peoples. Some supporting data are as follows:

- i. Tribal habitations have better water supply coverage compare to the non-tribal counterparts (Table-1).
- ii. There are very few 'Partially Covered' and 'Not Covered' tribal habitations (Table-2) compared to non-tribals (Table-3).
- iii. Proposed intervention being a SWAP, the state is committed to address the requirements of each and every demanding habitation.
- iv. Poverty: Extent of poverty is higher among the non-tribals (Table- 4). Per capita availability of land is higher for tribals.
- v. Literacy: There are more number of literate women among the tribals than that in the non-tribals (Table-5)
- vi. 'Tribals' Vs STs. Uttaranchal ST list has several high caste persons including Brahmins (Semwals, Sharmas, Chendolas), and Rajputs (Tomars, Chauhans) Labeling of ST has been accorded based on an 'area' (Jaunsar) in Dehradun, wherein the maximum STs reside and not based on socio-cultural identities

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Environment: Future activities that involve increased pressure on the natural resources such as forests can potentially lead to significant changes in hydrology and other climatic factors (in the long term) of the region.

Social: No adverse impacts are foresee

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Environment: Adverse impacts may occur only due to mismanagement during implementation of individual schemes. The EMF provides specifications and environmental codes of practices to ensure to mitigate any local level impact. Therefore alternative options will be considered during the planning and implementation of individual schemes.

Social: The project is expected to result in positive impacts only. No negative impacts are anticipated

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Environment: All environmental management measures are integrated with the overall project cycle and will be implemented at various stages of single/multiple village schemes during planning, execution and post-implementation through an integrated Operations Manual. The State Water and Sanitation Mission (SWSM) is the implementing agency with the overall project management support provided by the PMU. The PMU will consist of resource people from different disciplines and government departments and will be responsible for managing the entire project. They will be supported by the DPMUs in implementing the project at the district level. The PMU will nominate one of its members as "Environment Coordinator" (EC) for being exclusively responsible for ensuring the implementation of EMF in all the single/multiple village water supply schemes. S/he shall be the overall in-charge of implementing and coordinating the activities under the EMF of the project. The EC at the state level will be supported by an ES at PMU level. The DPMU as the district nodal agency will decide on the allocation of the core responsibility and ensure coordination between the GP and the UWSSC for better environmental management and mitigation of the adverse impacts. An Environment Specialist will be appointed at the district level for providing regular technical and monitoring support to each of the schemes. At the village level, the UWSSC will be implementing the project with support from a local SO. The SOs could be an NGO/CBO, a technical institution or individuals having necessary technical skills.

Social: A detailed earlier, the required institutional arrangements will be in place to ensure voluntariness in land transactions.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Environmental: The environmental analysis and catchment studies were undertaken through a participatory and consultative approach. Information on various environment aspects of environment related to water supply and sanitation were collected through structured questionnaires and extensive consultation with the local people and other stakeholders as identified. Stakeholder consultation workshops were conducted to discuss the EA findings and the EMF among the various agencies that are directly or indirectly involved in the water supply and sanitation sector.

Social: Extensive consultations have been conducted primarily as a part of the Social Assessment study with a variety of stakeholders at different levels. They include: tribal communities, elected representatives including those of the Gram Panchayats, policy makers, administrators, NGOs and consultants. These consultations have helped in mapping the settlements; analyzing their current status and issues thereof; and drawing future course of actions, including deciding on triggering or otherwise the Bank's Operational Policy (OP) 4.10. The draft social assessment has been shared with key stakeholders and is under finalization. The project's social assessment report will be translated in a booklet in the local language and shared with all the GPs and relevant government departments.

B. Disclosure Requirements Date

Environmental Assessment/Audit/Management Plan/Other:

Date of receipt by the Bank	12/07/2005
Date of "in-country" disclosure	06/17/2005
Date of submission to InfoShop	02/17/2006
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	

*** If the project triggers the Pest Management and/or Cultural Property, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?	Yes
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?	Yes
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes

OP/BP 4.36 - Forests

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?	Yes
Does the project design include satisfactory measures to overcome these constraints?	Yes
Does the project finance commercial harvesting, and if so, does it include provisions for certification system?	No

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank's	No
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Infoshop?

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs? Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies? Yes

Have costs related to safeguard policy measures been included in the project cost? Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies? Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents? Yes

D. Approvals

<i>Signed and submitted by:</i>	<i>Name</i>	<i>Date</i>
Task Team Leader:	Ms Midori Makino	
Environmental Specialist:	Ms Sonia Chand Sandhu	
Social Development Specialist Additional Environmental and/or Social Development Specialist(s):	Mr Ranjan Samantaray	
<i>Approved by:</i>		
Regional Safeguards Coordinator:	Mr Frederick Edmund Brusberg	
Comments:		
Sector Manager:	Ms Sonia Hammam	
Comments:		