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DATE 20.2.86

Dear Shri Gole ji,

This is further in reference to our discussions for conservation of Sarus crane in the areas of its occurrence. I have created a Sarus-watch for Rajasthan. The members will report on sightings and breeding of Sarus between now & October, when we meet again. I will try to organise the village meetings & poster campaign, if the funds could be raised. In the meantime we will try to organise support for people's sanctuary.

I had some discussions with Dr. Archibald to start a few scientific studies at one or two stations in Gujarat & Rajasthan. He asked me to suggest my topic to you as you shall be preparing a project proposal. I propose that we undertake "Habitat and ecology studies on Sarus crane with a view to conserve the bird in its ecological niche". A smaller survey should also be incorporated to find out newer areas of its existence.

We are fully geared to take up this challenge. Hope to work with you in this holy job. With regards,

Truly yours

L of organic matter

HFL & MDDL where any recycling or rejuvenation
L is extremely difficult if not totally impossible.

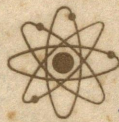
The indirect influences include changes in the occupational structure and life style of resident human beings, changes in the ^{existing} natural habitat patterns of other life-forms and consequent impacts of these changes on the water-body.

On the downstream side of the dam, ecological impacts are felt around the dam site, in the river basin between the high ^{altitude} dam & the pick-up weir and on account of ^{the} construction of canals. The severity of these impacts is increased when dams are built in the plains though opportunities of recycling & reuse of the water are also enhanced.

The direct consequences again include destruction of the original river basin, its habitat structure & life-forms, loss of flood plain area, flood plain values and ^{groundwater} recharge functions of the river. The creation of an island-like habitat in the midst of the plains is also a direct consequence of our water resources development projects.

The indirect consequences are modification of water flows, changes in their volume, timing, direction and spread, variations in the quality of direct and return flows, modification in the occupational structure of the human population and consequent changes in the land-use pattern and their impacts on the water-body itself & the river basin in the command.

The large-scale of the impacts of WRD projects in the catchment & command areas and the volumes



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Water Quality Recycling & Reuse

An Ecological Approach.

Prakash Gole.

Abstract: Water resources development projects in their present form, affect river ecology from the river's source region to the point where it meets the sea. The volume, character & quality of the river flow undergo change & the life-forms dependent on them feel the impact in various ways. The ecological approach considers this problem in a holistic manner, attempting to analyze the impacts felt by various living beings & suggesting solutions and remedies that should enhance the environmental quality of water resources development projects.

Western Ghats also called the Sahyadri is the source region of most of the major rivers of Maharashtra. Before these rivers come out of the mountains into the plains, they are impounded by large dams at several places in the Western Ghats. Large reservoirs so created have both direct & indirect impacts on water quality and ecology of the river. Resident life forms including human beings, are also affected directly and indirectly. Direct consequences include submergence of a large area of the upper catchment, creation of a deep water body with a large hypolimnion and a small epilimnion, a steep temperature gradient in the reservoir waters with a large anaerobic volume of water and creation of conditions over a large zone between