## Record of Irrigation Rights in Himachal Pradesh, India: Riwaz-i-Abpashi Records

Riwaz-i-Abpashi records (custom of irrigation records) can be found for each district of Himachal Pradesh. Their existence was first reported in *Property Rights and Network Order: The Case of Irrigation Works in the Western Himalayas* by E. Walter Coward, Jr., Professor of Rural Sociology and Asian Studies at Cornell University. Detailed examinations of a number of these records have now been carried out, and the results are to form part of a monograph being prepared under a Ford Foundation individual grant under which design types of various components of FMIS in Himachal Pradesh and hill areas of Uttar Pradesh are being recorded.

The Riwaz-i-Abpashi as a record of rights on a water source, be it an irrigation system or a natural stream or other source is unique to Himachal Pradesh. These rights were systematically recorded at the time of preparation of Land Settlement records which began for most of the districts in the first quarter of this century, except for Kangra District where the first such exercise was carried out in the 1850s. Coward's work relates to Kangra District. Land records prepared for all holdings under the Land Revenue Act serve as a record of irrigation rights also.

The Riwaz-i-Abpashi records generally carry any or a combination of the following items of information:

a. History of the *kuhl*; also names of beneficiary village(s) or individuals,

- b. Description of the method of diversion, repairs, operation and maintenance of the kuhl, penalties for non-participation in maintenance chores, and
- c. Water distribution/rotation modalities.

Not all the Riwaz-i-Abpashi records contain the same extent of information. In some of these records comprehensive information about the period when the system was created is given. A kuhl may be named after a person who may have built it or after the principal beneficiary village. Even though water is declared a state resource in Himachal Pradesh, the state government has steered clear of disturbing the beneficiaries' rights on irrigation as mentioned in these records. There have been various attempts to modify these rights by adding new beneficiaries but the record of rights has always come in the way. It may happen that in a kuhl created to serve a group of villages, many other villages lying en route may be prohibited from sharing of water from the same system.

The rights have also influenced the design of diversion structure of systems. The materials to be used in building a diversion weir or a stream are sometimes mentioned. This is done so that all the water available in a stream may not be diverted to a single system leaving the downstream systems without any water.

The Riwaz-i-Abpasi records invariably mention O&M modalities of a kuhl. The main O&M features appearing in a record are:

- a. All beneficiaries have to participate in rebuilding the diversion structure and the damaged sections of the canal,
- b. Presence of a beneficiary farmer or his representative is mandatory; otherwise, it may invite a cash penalty or even stoppage of irrigation water supply, and
- c. Some beneficiaries may be assigned specific duties which they have to perform.

A system may have variable degrees of rights for different sets of beneficiaries. Thus while the main beneficiaries may get a regular supply of water, others may receive water for a fixed duration or for a particular set of days.

Water rights, having been established by a process of historically acquired procedure, are also reflected in the water distribution practice. A popular method of determining water turns is by drawing of lots through the lottery system. Each beneficiary draws lots for a 24-hour water turn. Since it may not be possible for one person to handle the available quantity of water if it is large, two or even three people may come together as partners in the lottery.

Riwaz-i-Abpashi records may mention the type of outlet that may be placed in a canal bank so that a beneficiary may get his right share of water. There are seven different types of outlet devices that find mention in records. The smallest of these is so small that it may carry no more than 4 lps, while the largest may deliver nearly 60 lps. Under the Minor Canal Act of 1976 a record of irrigation rights has to be made for each canal. Thus for every new system now being built, such a record has to be produced.

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