WATMAN
The Complete package for Watershed Micro-Planning

"The Watershed Development needs accurate planning. It needs planning for variety of themes and features of the concerned area. The planning is for development and it is most concerned with the facts and features, at the current time and their interrelationship and futuristic equation between the actions and impacts of these many items." - Anonymous

The need:

The PIAs (Project Implementing Agencies) take the task of implementing the Watershed programmes. The PIAs after collection of data have to draw conclusions about the present features of the area, the requirements and needs of the area and the people thereof, about the activities as solutions for the problems,   etc.
It requires a definite technique to use the data, to draw conclusions and then take decisions about actions as remedy. No pre-defined, pre-tested and easy to follow procedures exist (or are not accessible to all), which could act as guidelines for the PIAs to methodically exercise micro-planning for Watershed Development.

❑ WHY THE PROCEDURE?

Not every one of us would know:

❑ The process of arriving at a fool proof action plan for Watershed development.
❑ As to what information at what step helps the process of planning?
❑ From which source, for what period/frequency, data is to be resourced?
❑ Which maps can be combined/used for mutual updating?
❑ How maps at different scales are combined/superimposed?
❑ How information is transferred upto khasra level?
❑ When to interact with villagers and how to use their inputs alongwith technical information?

The Procedure:

The guidance procedure is prepared in written document form. The users can take its advantage by adhering to the instructions in the sequence, which are already most logically arranged. The users, have to simply follow the activities mentioned, rather mechanically and they are driven through till arriving at suitable action plan. The process calls for a lot of mapped data illustrations and the cartographic work needs a assisting tool that is computer with CAD facilities. Hence it is customary to use software here. A combination of the documentation and the software is thus worked out for enabling an effective watershed planning. The software developed is meant for assistance in the planning process at several levels, and it basically acts as a tool for accessing the CAD functions related to the cartographic works. The software helps the total process of data recording into the computer, the illustration on maps, integration of maps, analyses, and eventually arriving at the to be proposed action plan for treatment activities for the watershed development. The unique feature is that the planning process sees a balanced use of scientific approach and villagers involvement to ensure that all the planned activities are technically viable and socially acceptable. A proper use will not only help and guide the user through the process, but it may lead to help achieve even that, which is beyond the scope of the here described planning technique.

Important features

- Complete stepwise procedure.
- Detailed documentation supported.
- Built in automation at several steps.
- First of its kind bringing technical information to khasra (village) map.
- Necessitates field and villagers' inputs.

Other Built-in Modules

· A full fledged glossary module on Watershed related terms.
· Papers/documents from Watershed experts.
· Multimedia based educational modules.
· Support material for conducting PRA in villages.

Details of Features of the Procedure:

1. Complete stepwise Procedure to Plan Watershed Development.
2. Designed under guidance of experts of Watershed, and experienced PIA (Project Implementing Agency) representatives.
3. Information from maps of various scales all brought to common scales.
4. Information finally transferred and made available at Khasra (micro) level.
5. Does include scientific information from Remote Sensing, thematic maps, secondary sources, etc.
6. Automatic scale alteration and map merging at various stages.
7. A full fledged CAD package works in background; may be accessed any time for any CAD utility.
8. Appendices included to detail any sub-procedure or to discuss methodology of important technical steps and field level works.
9. Includes a sophisticated Glossary package for ready references.
10. Includes standard Multimedia based, self explanatory, small, subject based educational documentaries for field staff and villagers.
11. Includes standard PRA support material to enable easy field working.
12. Requires simple PC and occasional peripheral support as hardware, that too for short duration.

LAYOUT OF THE PROCEDURE DOCUMENTATION

MODULE I: Basic Maps Preparation The first module deals with basic map preparation. These maps are all at small scales of 1:250,000 or 1:50,000 and are made from Survey of India toposheets and from remote sensing products. This module achieves the 'map base' preparation showing themes at village level and are prepared for miliwatershed unit.
MODULE II: Updating Maps, Scale Alteration & Analysis This module deals with mutual updation of the maps prepared in previous module and also performs few integration and analyses, exercises. This module also alters the scales of all maps to 1:12,500.
MODULE III: Microwatershed Level Works The module, uses the maps produced in previous module and allows them to be transferred to Khasra maps. Micro watershed level works. It helps arriving at several decisions regarding identification of treatment measures and suitable sites for these. The participation of the villagers is also ensured here. Action plan is prepared and finalised here, as per the actual ground level requirements and the consent of the villagers.

HOW TO USE THE PROCEDURE:

The procedure is provided under a package of written documentation and software. The document describes all steps for the entire process from beginning to end. All steps are arranged in logical order and therefore, these have to be followed in the same sequence. The document mentions steps to be performed manually and on computers and thus, it states clearly where and how the computer software has to be used. The users would keep on switching between the manual process and computerised processes alternately.

WHO CAN USE THIS PROCEDURE:

Users of the procedure are the Watershed implementing agencies. As such, there is no minimum specified qualification, or skill required to use this procedure, but it is expected that the user should be a team of individuals from various subject matters. The team should comprise of: · Person(s) should be thoroughly familiar with watershed programme and all its components. · Person(s) should have knowledge of computers and cartography. Regarding computers, the knowledge of Auto CAD software is essential. There is definite need of manual mapping also. · Person(s) familiar with remote sensing data interpretation are required at certain points. · Field investigators to carryout field surveys and to collect data. · At certain times, access to experts (visiting) will be desired, from disciplines such as hydrology, agriculture, forestry, civil engineering etc