

Certificate Course on Participatory Irrigation Management (CCPIM)

Module 13- Maintenance works of canal by Water User Associations

Topic 13.4- Quality control of works and their payments

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Quality control of
works and their
payments

Module 13 includes:

- 13.1 Canal Walkthrough, Measurements of Works, Priority
- 13.2 Preparation of Work Estimates
- 13.3 Administrative, technical approval of works and selection of agency for carrying out the works.
- 13.4 Quality control of works and their payments.

Quality control and payment of work

All the members of the Water User Association take care of the work done by the contractor. The farmers of the canal also supervise it on the spot. If any work is found to be defective or is found in small

quantities then it is corrected by the contractor on the spot. Quality of work is not compromised. The quantities and quality of the work is also looked after by the officers of the department.

For example, the maintenance works in the inner section of the canals need to be addressed at the following points to ensure the quality.

1. Where the bottom of the canal is lower than the designed level, grass should be peeled off with the help of spades or shovels.
2. All mounds of silt raised above the design level from the bottom should be removed to the right level of the bottom. The bottom should be levelled and its slope in length should be kept at par with the designed slope.
3. The level of the bottom of the canal should be set right with the help of a bed profile constructed at the bottom or with the firm bottom of pucca works like culverts etc.
4. The bottom should be levelled by cutting the silt collected at the both ends of internal cross section and spreading it in the middle of the bottom.
5. The existing bed-bars made of bricks or concrete etc. should be repaired with cement mortar wherever required.
6. The canal should be cleaned from the tail end towards the head starting from the tail or fall of the canal. The canal should never be cleaned in patches.

7. The deposited silt should be removed from the top of the bed before cleaning the silt. Silt cleaning in the canal will be carried out in such a way that the designed water flow can run at the full water level of the canal.
8. The extracted silt should be disposed off first, in filling the pits in the old bags and later on the outer slopes of the canal section. Silt should not be piled up above the top level of canal banks.

The following points should also be looked at by inspecting the canal to ensure quality control.

1. Silt deposits at the bottom of the canal, any change in the bottom width of the Canal.
2. Weed inside the canal.
3. Erosion of canal banks or erosion near the foundation of masonry works on the canal or erosion in the downstream of fall/regulator etc.
4. Blocking of evacuation / outlet pipe in the crest of the fall.
5. The blockage created by scrap, broken bricks or stone pieces collected around the masonry works, especially in siphons / water bridges, etc.
6. Any damage in the masonry works due to the spread of the roots of a tree grown near/ around the masonry work.

In this way, when those works are done with good quality by the contractor, then the work done is measured. On the spot verification and inspection is done by departmental officers. If running payment is necessary during the work, then the work done till that time can be measured by the departmental officer and the same can be paid.

The Water User Association, if satisfied with the quantity and quality of work before final payment, will call a meeting of the General Body of its committee. Canal officers should also be called to this meeting. Final payment of that work will be made to the contractor after the general body is satisfied on the work and agrees to the final payment.