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Completed Projects

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OPERATION AND MAINTENANCE OF COMPLETED PROJECTS

KEY NOTE

By

ENGR. R.K. ANVER

Any engineering project or for that matter any project or a system, may it be building, road, canal system, dam, power generation or distribution, railways, telecommunication, fulfill its functions only when properly operated and maintained.

Proper operational procedures and practices have to be developed for successful working of any project or a system. No matter how well constructed a project may be, proper benefits cannot be obtained unless it is operated and maintained at least at its optimum efficiency. Many a completed projects have failed purely due to lack of proper operational methods, lack of training of operational staff or lack of preventive and routine maintenance. For example some of the SCARPS have not attained the planned objectives due to failures in operation and proper maintenance. While the main objective of developing and following a proper operational system is to ensure that a project gives the planned benefits or results, a proper maintenance system is necessary to keep the project or a system in safe or satisfactory condition throughout its planned life.

Unfortunately, in most of the developing countries generally and in Pakistan particularly, the importance of O & M has not been appreciated fully. In countries like ours, developmental activities mainly comprise construction of new projects and this sector consumes substantial portion of the available funds ignoring proper financial allocations to the completed projects for O & M. Financial planners generally restrict the maintenance funds to level much lower than the minimum needed. Political and local pressures may also be responsible for out of proportion allocations for new development projects. Pakistan operates one of the largest irrigation network in the world. The Country has about 35 large dams, a number of small dams and about 20 barrages, proper operation and maintenance of which is of vital importance to the national economy. Similarly large networks in the communication, energy, telecommunication, tubewells, drainage systems, built at billions and billions of foreign and local currencies provide lifeline to the national economy. Proper O & M procedures and methods for all these system are of utmost importance.

Realising the vital importance of O & M of completed projects to the overall national economy and general lack of its appreciation in our country, the Pakistan Engineering Congress decided to organize a Symposium of this subject. The main objectives of the Symposium are to highlight the importance of proper operation and maintenance of completed projects in Pakistan, the problems faced for proper

maintenance on various projects by discussing some case studies and to create an awareness amongst planners, financial authorities, clients, engineers and others concerned of the importance O & M should be given. To make the subject as meaningful as possible, in a one day Symposium, we have selected eight papers relating to various projects to be presented, debated and discussed in this Symposium. The papers are:-

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|----|---|----|---|
| 1. | Historical View of Development in Design | by | Dr. Mushtaq Ahmed |
| 2. | Operation and Maintenance of Canals | by | Engrs. R. K. Anver and Riazul Haq |
| 3. | Maintenance and Operation of Completed SCARPS | by | Engrs. Hamidullah Khan, Syed Rahmat Ali and Moqarrab Khan. |
| 4. | Operation and Maintenance of Dams | by | Dr. Izhar-ul-Haq |
| 5. | SCARP Planning, Operation and Maintenance | by | Engr. Nasir Ahmed |
| 6. | Modern Telecommunications on Pakistan Railways | by | Engr. Khalid Qasim |
| 7. | New Concept in Modern Signalling Maintenance Methods. | by | Engr. Wasif Roheel |
| 8. | Maintenance of Drainage Systems | by | Engrs. Mansoob Ali Zaidi, Haroon Shami and Muhammad Mehdi Zaidi |

We have made an effort to include some major projects and systems so that various technologies adopted for O & M, the constraints and efforts made can be highlighted and discussed.

I am confident that papers presented, discussions held and suggestions made in this Symposium will be highly educative and informative. I am also confident that the recommendations made as a result of the deliberations of this Symposium will attract due attention of all concerned.

On behalf of the Pakistan Engineering Congress I wish to convey my deep appreciation and thanks to the Chief Guest, the honourable guests, authors of the papers presented, participants of the Symposium and members of the Press for attending and taking part in the deliberations of this Symposium. I am honoured to be associated with this Symposium as its convener.

Pakistan Engineering Congress deserves to be congratulated on selecting such an important subject to be the topic of this Symposium.

Thank you very much