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By

Engr. Mian Mazhar ul Haq
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SYMPOSIUM ON RURAL DEVELOPMENT

KEY NOTE

Pakistan is basically an agricultural country and in order to make full use of its potentials in this field, it is important that every aspect of Rural Life is tackled on scientific lines. It calls for a comprehensive treatment which should result in repid growth of agriculture as an industry, with maximum benefit to the worker in the field. Unless serious efforts are made to improve the lot of the peasant, which is the most important resources of our country, their flight to urban areas and even to other countries cannot be stopped. On the other hand agriculture as an industry, cannot be developed on scientific lines without the trained manpower. None of the programmes in the sector of Rural Development such as clean drinking water, sanitation, education, electricity, water management, salinity control, mechanized farming, soil conservation, agriculture loans, Cropping Cycle, Agricultural Research, Plant protection, Transport, Agro based industries, social economic programme and health programme etc. etc., can be effectively managed without well trained and well contented manpower. The so much talked about adaptation of modern technology can only be made effective through well trained labour. A lot of work will therefore, have to be done to extricate the rural population from the difficulties presently being faced by them and to bring about transformation in their outlook. There is no doubt that some work has been done in some fileds in the recent past, but most of the villages are still as backward as ever, many of them still do not have safe water to drink, what to talk of sanitation or a decent dwelling.

The development of our rural areas, therefore calls for a comprehensive treatment and all pronged attack under a well conceived plan, preferably through a singular monitoring Ministry, which should be able to co-ordinate efforts of various deciplines and avoid overlap and wastage.

The present symposium, arranged by the Pakistan Engineering Congress is a major step in identifying the problems and needs, connected with Rural Development. Efforts were made to make the symposium as comprehensive as possible for which purpose various organisations were approached for contributing their valuable experience. Some responded well and the result is evident for the following pages. Others may like to come forward, at some other appropriate time, but if all organisations, Government, Semi-Government and Private, pool their resources and tackle all problems connected with Rural Development, collectively, dramatic effects cold become visible immediately and the dream of green revolution could become reality within a very short span of time.

The authors who have contributed papers for this symposium have tackled various problems with which they have been associated in accordance with their own experience. Many of us may have different experiences, which too should be shared with other. There are many topics which are vital for Rural Development but may not have found place is todays symposium. The Engineering Congress would welcome more and more material suggestions and proposals etc. etc., not

only from different desciplines of Engineering & Technology but also from Agriculturist, Economists, Social Welfare Organisations as well as Private individuals, as a fellow up of the present symposium.

The current symposium offers food for thought on the following topics:—

1. **Strategies of Rural Development in Pakistan**

Mr. M.S. Cheema Director General (Water Management), Agricultural Department gives a vivid picture of our Agricultural needs, past experience, policies, programmes, failures and their causes. He has stressed on the need for setting up Projects that will support one another after carrying out realistic assessment of their interdependence as well as their inter-action with Social Economic condition of the people. He strongly recommends:

i) Maximum participation of beneficieries in decision making

ii) Total mobilization of Human Resources

iii) Decentralisation of Decision making

iv) Effective delivery system

v) Evolution of self reliant and self supporting institutions

He has also suggested grater reliance on On Farm Management techniques, by curtailing wastage and losses composed to addition of more water in the system. He recommends greater reliance on the water users Associations, who have done commendable work in water conservation in the past.

2. **Private vs Public Tubewells**

Mr. Ramiz Ahmad Malik Chief Engineer (retired) Irrigation Deptt. has carried out a vary interesting and educative comparison of the performance of different capacities of Tubewells for fighting water Logging and Salinity problems installed by Wapda, as well as private individuals. In doing so he has taken all aspects into consideration, such as initial cost per unit discharge, operating cost, life of tubewell, utilization and performance etc. etc. In the final analysis he feels that private tubewells will have to play greater role in this field in the Sixth Plan Period.

3. **Impact of Salinity Control & Reclamation Projects on Rural Development**

Dr. N.M. Awan has presented a very educative performance evaluation of various projects launched by the Government in the past to fight the "twin" menace of waterlogging and salinity, which poses is a real threat to rural economy. His diagnosis indicates major flaws in the past as, absence of participation by the Farmer, lack of co-ordination between Wapda staff and the

consumer, cumbersome procedure for electric connection, etc. etc. His analysis shows that in the past the growth of private tubewells went much beyond the expected rate. He is of the considered view that this trend will continue but, unless, some serious studies are carried out in removing the interaction of technical problems as well as social and economic problems, the private sector may not be able to bring about the desired result and may get begged down as did the scarp projects. Since the problems, identified are common, the author is of the considered view that unless an integrated study is carried out to remove the present hurdles, maximum performance efficiency of any such programme can hardly ever be conceived.

4. Maintenance and Operation of Tuebwell

Sh. Abdul Hamid Arif Superintending Engineer, Scarp II, Sargodha has made a comprehensive study on the performance of tubewells in scarp areas and has come out with definite areas of weakness which need attention for achieving better performance/out put, from such tubewells. The suggested remedies will go a long way in prolonging the life of tubewells as well as economic on their operation.

5. Enhancing Water Availability to Farmers — A New Approach

Engrs. Nazar Mohammad M.I. Shaheed and M.A. Zaidi in their joint paper have highlighted the losses in our water courses as well as snags in the operation of private tubewells. He recommends greater emphasis on making pucca nakkas, straightening, cleaning and compacting the banks of properly designed water courses, followed by regular maintenance. They also suggest lining of channels in water logged areas only, strongly urge installation of shallow private tubewells in useable ground water zones, by liberalising loans for such tubewells.

6. Farm Machinery and its Role in Rural Development

Mr. Sikandar Khan Managing Director, Millat Tractors Ltd., Lahore has analysed the need for different kind of Farm equipment and machines suited for different crops. In doing so he has made convincing comparison of yields with modern equipment and that with conventional methods. He is of considered opinion that we have almost reached the limits of water and land resources and it is now only the modern agriculture machinery that can help grow more food, for our ever increasing population.

7. Drinking Water Supply Coverage to Rural Areas

Mr. S.M. Ashraf Superintending Engineer, Public Health Engineering Department Gujranwala, states that one of the major hurdles in Rural Development is, water borne diseases such as Dysentry, Diawrhia, Typhoid, Cholera, Hookworm, Small Pox, Measles and even T.B. etc. These diseases are rampant in our rural areas and not only cause large scale death,

especially amongst children, but also cripples the manpower so badly needed for development programme. He has suggested greater emphasis on eradication of these diseases by adopting preventive measures, compared to curative measures. If only our rural population could have access to germ free drinking water, it would be singalar major step, boosting rural development. In his paper he has discussed different methods of purifying the water available in nature, suting to different parts of the country such as Sweat water zones, Arid zones, Salpine zones, Storm water zones, Hilly areas etc. etc.

8. Sanitation and Drainage in Rural Areas

Rana Mohammad Saeed Ahmad Khan, S.E. Public Health Engineering Circle, Lahore, in his paper, informs that hardly 1.78% of our Rural Population is served with adequate sanitation and drainage arrangements which is negligible. He stresses that alongside the provision of safe drinking water, proper arrangements for the proper disposal of used water is as important, if full benefit from the systems is to be achieved. It is only with adequate arrangements for disposal of waste water as well as solid waste, that complete eradication of water borne diseases can be achieved. He has made several low cost suggestion for the disposal of both, liquid as well as solid wastes, which can be safely adopted suiting to local conditions. The fact remains that this aspect calls for higher priority in our development programmes, since it deals with human beings not only because they are the principal development resource but also from humantarian point of view.

Apartment from suggesting technical solution to the problems he also lays great emphasis on community education and participation, for making any Rural Development Programme a real success.

9. Rural Roads

Rana Akhtar Ali Chohan Chief Engineer, Highways (South), Lahore, has laid great stress on construction of network and rural roads, for making the farm produce reach the market in minimum time. The age old Kacha Village tracks can no longer meet the present day needs. He is of the considered opinion that revolution in Rural Socio Economic conditions can only be brought about, by giving priority to the construction of adequate all weather roads, in rural areas. In his analysis he has drawn the conclusion, based on past experience, that such a programme can be successfully implemented only through a specialised agency, compared to local agencies. He states that the Punjab Highways Deptt. has built about 3000 miles of village roads during the period 80-81 to 84-85.

10. Rural Electrification

Engineer Abdul Aziz Chaudhary have offered a paper on Electrification of villages. This is another vital area which calls for

immediate attention. Rural electrification contributes towards increased agriculture, reclamation, of water logged areas, small industries, not to speak of the standard of living in general. There are 43244 villages in Punjab and hardly 1/3rd are electrified. The paper lays down the strategy for electrifying the remaining villages during the next 10 years.

11. Non Conventional Energy Options

Engr. Mushtaq Ahmad Bhatti, Project Manager, Nespak, Lahore in his paper suggests utilization of non conventional energy resources to meet the energy gap, especially in rural areas. The Hydro-electric power is badly falling short of ever increasing demand. The fossil fuels, on the other hand, are getting out of reach. He strongly urges the use of Biomass as a major alternate for meeting the energy needs of our rural areas. The raw materials such as cow dung, rice husk wood chips, saw duet, barks, cotton bolls, nut shells, straws etc., etc., are readily available and can be usefully utilised. In areas where there is lot of wind, through out the year like lower Sind and coastal greas of Baluchistan, the use of windwill could he made with advantage.

He also recommends continuous research work on the utilization of Solar Energy, which should come within the reach in another 5 to 10 years time.

For long term solution he is of the strong opinion that Pakistan has to exploit nuclear energy, as quickly as possible, for effectively closing the gap between the ever increasing demand on energy and the possible increase in production of Hydro electric, Thermal Power and other non conventional methods, in future.

It is hoped that other people from different backgrounds concerned with the countries Rural Development, will whole heartedly come forward and share their knowledge and experience with their country man. While at the same time the Govt. would consider very seriously setting up a high power nuclir capable of making vital policy decision on controvercial matters as well as co-ordinating the preparation and implementation of a comprehensive integrated Rural Development programme for launching an all pronged attack, by the various agencies belonging to the Local Government, Provincial Government and Federal Government.

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