

Need for community-based natural resource

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By Sikander Brohi

Majority of the population of Pakistan is rural-based and relies on employment and income that depends — in one way or the other — on agriculture. Agriculture growth is a catalyst for broad-based economic growth and development of the country; and agriculture's links to the non-farm economy generate considerable employment, income, and growth. The importance of agriculture to the economy can be identified in three ways: first, it provides food for consumers and fiber for industry; second, it is a source of foreign exchange earnings; and third, it provides markets for the industrial growth. A study of agriculture in Asian countries found that a 1% increase in per capita agriculture growth in these countries led to a 1.5% increase per capita in the non-agriculture growth.

Increase in agriculture growth leads to larger increase in non-agriculture growth for two reasons. First, agriculture has strong linkages to farm inputs such as chemicals, fertilizers, and machinery as well as food and fiber processing. Second, the increase in agriculture incomes is usually spent on locally produced goods and services that have high-income elasticity of demand, and that also generate employment. Thus, increased agriculture productivity, correlated with overall economic growth, tends to increase rural employment and alleviate poverty.

At the time of its independence, agriculture was the dominant sector of the economy of

Pakistan. However, the contribution of the agriculture sector to the Gross Domestic Product (GDP) of the country at constant prices have continued to decline since then, from a level of over 59.9% in 1949-50 to 24.5% in 1996-97, though it still remains the major sector of the GDP composition. It contributed about 25.2% (at constant factor cost of 1980-81) of the GDP in 1997-98, while in 1998-99 its share in GDP was recorded as 24.5%.

Agriculture sector in Pakistan in general, and in Sindh in particular, has remained a victim of piece-meal and ad hoc public sector policies, with no comprehensive policy framework having been prepared and implemented so far for its development. Only need-based policies and actions have governed the sector, with the majority of these policies coming after visible threats and complexities were experienced within.

The pre-partition days saw the boom of irrigation system development on the Indus River with a basic objective of bringing more land under crop, while paying little attention towards the impact of such one-sided development. Soon after independence came the slogan of 'green revolution and 'grow more crops'. This process brought with it mechanization, high-tech inputs including pesticides and fertilizers. Again, little attention was paid on the economic as well as the environmental cost of these changes. Due to lack of a holistic approach in the sector, it appears that if one area has developed — if at all — it has developed at the cost of many others.

The world's largest irrigation system on Indus River brought with it the worst crisis of water-logging and salinity. The 'green

revolution' gifts of 'grow more crops' with the maximum use of fertilizers and pesticides cost the growers in the form of land degradation and worst environmental impact on biodiversity coupled with an increase in the input cost. The incentives provided by the government, to grow more cash crops so as to earn foreign exchange in the form of exports, resulted in a decrease in the production of food crops. It is due to

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such half-baked policies that today the agriculture sector of Pakistan is afflicted with problems, and its resources are fast

degrading.

The only solution to such complex problems lies in a holistic and sustainable approach towards agriculture. Therefore, the policymakers have to change their mindset of being mere problem solvers to creators of sustainable policies, with little risk of creating problems. The agriculture sector has to be looked into from a broader perspective of properly utilizing natural resources — such



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as land, water, forests, wildlife, deltas, coasts, etc. and allied sub-sectors such as livestock, fisheries, and poultry — for economic benefits without posing threat to any of the former. A scientific approach is required to bring the whole biodiversity into consideration while preparing and implementing policies for the sector. Any new development approach towards the agriculture sector should also aim towards conserving and protecting natural resources that are the very basis of our existence and livelihoods.

One instance of the present non-environment friendly agricultural policies is the menace of land degradation that is increasing in Sindh at dangerous proportions. The lesson one can learn from the basic causes of land degradation is lack of awareness at the community level as well as mismanagement and lack of community participation in the development projects. This has resulted in little impact of the anti-land degradation efforts by the government in Sindh. Such a situation warrants that there is a dire need for launching a community-based Natural Resource Management Plan to attack the menace of land degradation and other problems of natural resource degradation. The basic components of such a plan should be:

- * A massive community awareness program about the importance of natural resources for rural livelihood and the survival of human beings. It should also highlight the impact of resource degradation on the livelihoods of the rural communities. All the available resources i. e. extension wings of various departments, radio, TV, and regional newspapers can

be used such for this purpose.

- * Awareness about the threats to natural resources may not help until and unless preventive measures in this regard are properly defined and promoted among the rural communities.

In this regard, proper methods of land use; cropping patterns; optimal use of irrigation water; and proper growth of trees can be communicated to the agriculture communities. A number of these measures do not need major public sector institutional support and can be undertaken by the communities themselves, if properly trained and sensitized. The communities can take over a lot of responsibilities in this regard.

- * Any plan of the management and conservation of natural resources can only be successful if the institutional capabilities and the capacity of the public sector institutions/departments is strengthened. There is a great need for rescuing the public sector departments from stereotypical approach, red-tapism, inefficiency, knowledge-poverty and mismanagement, and converting them into vigorous, responsive, effective, well-managed and well-informed institutions and departments.

- * All the policies and programs on natural resource management may run the risk of failure in case effective stakeholder participation is not ensured, from planning to the implementation of such programs. Therefore, all the public sector policies and plans about natural resource management should provide for effective participation of the real stakeholders — the rural agriculture communities.