Rural Development in the 21st Century: Some Issues

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INTRODUCTION

Rural development is essentially a part of the process of structural transformation characterised by diversification of the economy away from agriculture. This process is facilitated by rapid agricultural growth, at least initially, but leads ultimately to significant decline in the share of agriculture to total employment and output and in the proportion of the rural population to total population [Johnston (1970)]. Rural development, as such, is not an end in itself but a means to an end and can provide the basis for a sustained and equitable economic growth of all sectors of the economy.

The main theme of the paper is to contribute to the perception of rural development in Pakistan by delineating the pros. and cons. of past rural development efforts and the ensuing crisis in agriculture. Possible strategies for sustainable agricultural growth and rural development and the formal approach for their implementation are described in subsequent sections. It is argued that the whole scenario requires courage and political will of politicians to decentralise the development process. Concluding comments and future options for research appear at the end.

PAST EXPERIENCE: CRISIS IN AGRICULTURE AND DILEMMA OF RURAL DEVELOPMENT

Past Experience

The annals of village development in Pakistan provide evidence that a number of experiments were made eversince the early years of the 20th century to reactivate the rural economy. These measures were scanty and did not establish gross-roots for

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lack of drive, vitality and participatory confidence of all the segments and sectors of the society.

"Dehat Sudhar" and "Panchayat" were the two systems or concepts that were addressed before independence. The literature reveals that these efforts could not be institutionalised with some serious effort and were just used as tools of control of the rural community by the colonial rulers. However, after independence in 1947, some concerted efforts were made in the field of rural development. An over view of these development programmes is given.

The village Agricultural and Industrial Development (Village-Aid) programme was initiated in 1953 to work through community development centres. The achievement of the programme was, by and large, marginal. Amongst others, major weaknesses of the programme were: lack of cooperation between the village Aid organisations and the other nation building departments and imposition of leadership from outside [Pakistan, FAO/UNDP (1973)].

The institution of Basic Democracies was introduced in 1959 in order to remove deficiencies that had characterised the Village-Aid Programme and to utilise the concealed unemployment in the rural sector. This effort was further substantiated in 1963 by the introduction of Rural Works Programme (RWP). The scheme did not yield desired results as it became excessively a political slogan rather than a programme of rural uplift [*Ibid* (1973)].

The Academy for Rural Development was set up in East Pakistan (now Bangladesh) during 1960s'. The Academy offered an agriculture-oriented practical model for cooperatives, acceptable to farmers, workable and manageable by them at village and thana level in the Comilla Project Area. The magnitude of success of the project was considered comparatively too small to justify the funds pumped into it in the form of Dollars and advisory services. As such, replication of Comilla model in other parts of the country (West Pakistan) was not considered.

The integrated Rural Development Programme (IRDP) alongwith the Peoples Works Programme (PWP) emerged as a combination of the above mentioned models with the induction of private sector during the first half of 1970s. It was based on a two tier system, one at the Village level and the other at the "Markaz", comprising 50 to 60 villages; involving the rural community in the process of development. It did not make any notable contribution to the rural economy. The IRDP officials did not cooperate with each other in planning and organising the development programmes. One of the important component of IRDP—the cooperatives in the Markaz failed in generating funds from within the project area. Neither was success achieved in mobilising human resources nor these cooperatives were able to ensure peoples participation in this programme. The local bodies established at the gross root level never became a part of this programme [Gill (1976)].

The Integrated Rural Development Programme (IRDP) and Peoples Works Programme (PWP) were merged in 1979 and redesignated as Rural Development (RD). The programme turned out to be a replica of Basic Democracies System with the only difference that local bodies were not required to serve as an electoral college. This set up, like the previous ones, did not make any considerable dent in the perpetuating problems of rural masses [Pakistan (1988) and Gill and Qamar (1988)].

The present rural development activities in Pakistan are completely enveloped by the local councils, represented by the elected representatives. Efforts undertaken have helped in bringing improvements in establishing infrastructure such as roads. However, diversification towards health, education and human resource development activities have not ensured broad based participation of rural communities. In summary, formulation, planning, organisation and implementation of rural uplift or development activities in Pakistan have remained more man than community-centred [Pakistan (1988); Gill and Qamar (1988) and Pakistan (1998-99)].

Crisis in Agriculture

Pakistan is still predominantly an agricultural country even after half a century of concerted efforts towards industrialisation. The dominant production activity of the rural sector is agriculture. Although migration from rural to urban areas has increased considerably over the past two decades, nearly three-fourths of the population still makes its living through farming and lives in villages. This makes agriculture the largest employer in the economy, accounting for 54 percent of the country's total labour force and supporting, directly or indirectly, 70 percent of its population [Pakistan (1998-99)].

There is no denying the fact that agriculture has an important role to play in overall economic growth, poverty reduction, resource management and over all development. It has direct bearing on the economic growth by having 1/5 share directly in the economy and further indirectly through adjustments and expenditure patterns of rural communities. As reported in a study undertaken by World Bank (1994) each one-percent increase in per-capita agricultural growth leads to 1.5 percent increase in per capita in non agricultural growth. Increasing incomes in agriculture are spent on locally produced goods and services and help to increase rural employment, reduce poverty and serve as a pre-condition in enhancing rural development. Moreover, the contribution of agriculture to manufacturing is substantial. Industries dependent on agriculture have the highest value added and indirectly exert significant influence on overall growth of the economy.

This dependence of the economy on agriculture has created a crisis situation, Pakistan has been facing for some years now. The steady growth rate of the yester years is a dream and uncertainty now surrounds its performance. The growth rate of agriculture touched as low as 0.12 percent during 1990s. This has happened in a country where the rate of agricultural growth, on an average stayed around 6.77 percent in the 1960s and about 6.14 percent in the 1980s [World Bank (1994); Pakistan (1998-99)]. Non-diversification of the rural economy, an over pressurised agriculture (particularly the crop production), intensive cultivation of land without conservation of soil fertility and soil structure have led to decline in production and productivity with the attendant uncertainty [Ahmad and Gill (1998)]. Excessive dependence on agriculture has created a culture of excessive and indiscriminate use of fertilisers, pesticides, fungicides and herbicides combined with unscientific tapping of underground water that has made the agricultural economy vulnerable to all sorts of fluctuations [Pakistan (1988)]. The growth rate of agriculture started declining during the 1990s. It was 0.12 percent in 1996-97, picked up again and stayed just at 0.35 percent during 1998-99, even in the wake of ongoing agricultural and rural development efforts. [Pakistan (1998-99)]. Policies to get short term gains have only succeeded in putting at stake the long term objectives such as selfsufficiency in food etc.

RURAL DEVELOPMENT'S DILEMMA

As noted earlier, rural development is a total process of economic, social and human development. Development programmes have different connotations in different political and social systems, but common to all is the need to reduce unemployment, poverty and inequality with the participation of the masses.

Despite the rhetoric and insistence on local or popular participation in decision making, all development models had the same "up-down" relationship, but with full government support to safeguard rural Pakistan from the clutches of stagnation and poverty. The programmes were expected to raise agricultural productivity, improve marketing infrastructure, provide welfare services, develop cottage industry and other income/employment generating activities. These development paradigms improved the rural scene somewhat, but the available commentaries and statements on the performance of these programmes are highly contradictory. However, the available information reveals that each programme achieved a limited success with little tangible benefits to the real clientele. The major beneficiaries were, by and large the well-to-do farmers. Little was achieved in terms of increased production, income and welfare of the prospective beneficiaries. Majority of the rural poor could not derive much benefits. The impact of these programmes on rural life has remained quite marginal. [Pakisan, FAO/UNDP (1973); Pakistan (1988); Mustafa and Gill (1998) and Pakistan (1998-99)].

Even today nearly one-fourth of the country's population subsists under extreme poverty conditions. Almost 50 percent of this lives in rural areas, which include small farmers, and other non-farm rural households [Pakistan (1988)]. This

scenario is supported by a number of studies. Naseem (1986) considered that 43 percent of the rural population lived below poverty line. A world bank report (1991) indicated that the highest 20 percent of the population share 40 percent of income and consumption. Arena (1994) indicated that 30 percent of the population in Pakistan lived in absolute poverty. It is thus evident that benefits of development have not trickled down to the rural masses as envisaged by the planners and policy makers, mainly due to mass scale illiteracy and lack of technical know-how. This has kept the masses away on the periphery from the core of development. It has been established that agriculture income is the major source of income inequality in rural Pakistan [Adams and Alderman (1993) and Richard and Jane (1995)]. Income inequality leading to poverty is attributed mainly to defects in the mechanism of distribution which is subject to wide diversity in the ownership, use and access to income generating resources between the farming community in particular and the rural masses in general. It has further been established that the farm area, cultivated area and irrigated area inequalities between different farm size groups in Pakistan have risen overtime [Gill and Mustafa (1997)]. Moreover, Srinivasan (1993) has quoted from different studies on Pakistan that agriculture has a strong interaction with rural poverty and it is quite higher than urban poverty.

The dominant aspect of rural Pakistan's socio-economic scene is its feudal nature, that makes it very difficult for the fruits of overall growth and development to percolate downwards. It gives the socially dominant class enormous economic benefits through unequal exchanges and its access to income generating/assisting resources [Mustafa and Zulfiqar (1998)]. The poorer sections, by and large, remain passive and ill-organised, the result of mass scale illiteracy. They can neither understand increasing sophistication of the urban areas nor the complicated working of government organisations. The masses are neither involved in planning nor in the implementation process [Pakistan (1988)]. Any developmental programme, when it gets implemented, therefore tends to deviate from the poor and illiterate and benefits the richer and educated groups of the society. This is one of the major structural problems which has made almost all attempts for rural development ineffective in Pakistan.

THE STRATEGY AND THE FORMAL APPROACH TO RURAL DEVELOPMENT

The Strategy for Rural Development

The concept of rural development is conceived as an improvement in the economic and social conditions of the rural people. All efforts should be directed for uplifting the social and economic status of the rural masses. Agriculture being the major activity of the rural communities, nevertheless, as a first step efforts are needed to boost agricultural production and productivity, and then to launch the process of rural diversification. The increasing production and productivity would

facilitate the process of siphoning surplus labour from agriculture to non-agriculture sectors.

The withdrawal of excess labour from agricultural production activities does not mean that it is to be taken to urban centres, but to be gainfully employed in and around villages through rural employment opportunities by retaining and using rural resources, human or capital, in rural areas, particularly in the production of wage goods from activities like agro-based industry, horticulture-based industry, industry related with dairy, fisheries, sericulture, cottage industries of different types and style, agro-forestry and forest based industry. Such activities fetch a better price for the farmer, and the value added to the product is shared by the rural community. This paves the way for the generation of new indigenous technologies giving rise to further employment opportunities, and paving way for correction of distribution patterns and alleviation of poverty. In the long run this can increase incomes and would result in upgrading villages into towns, and serve as a natural check on rural to urban migration. It can further enhance a strong agriculture-industry link in the longrun. As an outcome the creation of small towns and large villages and industrialisation based around these centres will be easy to handle in terms of planning, security and other related problems and provide an incentive for further development.

Any developmental programme would not be effective in developing rural areas or helpful in achieving the desired goals of prosperity without optimal utilisation of available resources and effective participation of the people. Participation and involvement of the people is something which cannot be achieved by mere asking but has to be voluntary and reciprocal. It requires molding opinion and nurturing qualities of imagination, initiative and spirit of dedication among the villagers. As such, leadership from within the rural folk should be drawn if sustainable agricultural growth and a comprehensive but lasting rural development pattern in the long-run has to be achieved. Keeping in view this long-term aspect of rural development, we now turn our discussion on human resource and infrastructure development.

Human Resource Development

The present rural scene in the country is marred by the appalling illiteracy and ignorance alongwith disease and poverty [Pakistan (1998-99); World Bank (1994); Srinivasan (1993); Richard and Jane (1995)]. This weakens the power of decision, causes frustration and depresses the potentialities of human resources. The development of human resources is thus vital to the uplift of rural society. Without developing human resources, the society will be compromising on a declining structure of political and social life, creating strife in place of welfare.

In a wider sense, the development of human resources means a process enabling the society to build capacities and abilities (both material and spiritual) of individuals in such a manner that these are of some use both to the society and the individual.

The advent of the 21st century invites us to build a self-reliant society with a scientific bent, through an education system that trains our manpower for specific requirements in technology, engineering, management, administration and teaching.

A number of studies on Pakistan reported by the World Bank (1994), have emphasised the need for education and human resource development. It is noted that a 10 percent increase in literacy increased total factor productivity by 2.7 percent, area under irrigation by 2.4 percent and share of area under high yield varieties by 1.3 percent respectively, indicating the dominant role of literacy. Moreover it is established that there is a strong complementarity between education and the provision of extension services. It is further noted that the quality of education is a major concern in determining the productivity of farmers and the share of the common man in total rural income.

A properly monitored system of education is the need of the time and may be developed both at the primary and higher levels. Manpower should be trained according to the desired needs of the community and the curricula so tailored that students, on completion of their studies, automatically find jobs. The imparted education should be functionally useful and also relevant to the present and future needs of the communities.

NEED FOR RURAL INFRASTRUCTURE

The World Bank Report (1994) contends that improved infrastructure not only facilitates agricultural production, but also generates non-farm income opportunities, which are crucial to poverty reduction. Moreover, human resource development and the knitting of various rural development activities into an integrated whole is almost impossible without proper infrastructural development.

Investments in infrastructure and the provision of related services are integral to the process of development [Wanmali and Yassir (1995)]. Infrastructural investments (roads, electrification, irrigation, telecommunication) in agriculture play a key role in improving agricultural production [Wanmali (1992); Ahmad and Donovan (1992)]. It has been established that investment in infrastructure helps in increasing accessibility of people to services, and in the dissemination of new technologies [Wanmali and Yassir (1995); Cites Ahmad and Hussain (1990) and Hazall and Ramasary (1991)]. Moreover, investment in soft infrastructure (services such as those related to transport, finance, input distribution, animal husbandry and marketing etc.) is equally important. In the absence of these structures the very outcome would be unsound planning and execution of development programmes.

The importance of infrastructure cannot be denied but insufficient attention

has been given in the past to the development of infrastructural facilities in the rural areas [Pakistan (1988) and World Bank (1994)]. One major reason responsible for slow pace of rural development is the poor capital formation in rural areas, an outcome of limited access of people to the services offered by rural financial institutions [Pakistan (1988); Mustafa and Zulfiqar (1998)]. There is dire need for the provision of infrastructural facilities, i.e. education, transport, communication, health and banking etc. to the rural communities. In the absence of these services the human resource development and the objective of transforming rural communities from poverty to prosperity will remain a dream.

FORMAL APPROACH TO RURAL DEVELOPMENT

Mindless urbanisation of rural areas may not be conceived as rural development. Neither the creation of consumerism can be judged as rural development, nor the provision of goods and services enjoyed by urban folk to the rural masses can serve the desired purpose. Moreover centralised macro-perspectives will also not generate the desired results, since every village/region is a different entity and it is impossible to implement centrally planned and even well conceived programmes uniformly in all the areas while ignoring their micro level variations. The bureaucratic and impersonal process of implementation of rural programmes should therefore be discarded. Any development programme aiming at the transformation of rural societies should take into account the socio-economic aspects and the behavioral pattern of rural society.

Any change aimed at improving efficiency and income of rural people should not attempt to sever their relationship from their social and cultural heritage. At the same time the development model or programme should have the essence of horizontal movement and not vertical linearity in order to maintain the balance between economic and social aspects on the one hand and encourage participatory enthusiasm, in planning, implementation and execution of developmental efforts on the other. Thus any developmental effort has to be slow and gradual but persistent, so as to allow the rural people to absorb the spirit of change in the perspective of social harmony. The process of human resource development and the investments in infrastructure should move along these lines.

For achieving the forestated goals and purposes, a well thought out and carefully designed local institutional/organisational structure needs to be established. Under this set-up the institutions should think and plan locally and at the same time have an understanding of the outside world. This alone can promote both economic and non-economic factors (i.e. nutrition, health, education etc.) alike.

THE POLITICAL WILL AND RURAL DEVELOPMENT

Pakistan is not poor in manpower, talent, planning expertise and institutions of research and development. However, sustained and directed research and a strong political will are some of the essential pre-requisites for achieving the desired goals. The development process that started with the birth of the country, has had much success, but has been limited in scope. Almost all efforts have failed in achieving distributive justice for the lowest rungs of the society. As noted earlier, envisaged benefits of planned changes through different rural development efforts have not percolated downwards to the poor. The basic reasons are vertical linearity in planning and in the execution of rural development efforts. Moreover, attention has not been given to horizontal spread of programmes through active and concerted participation of rural masses, who are at the lowest rung of illiteracy and poverty. Amongst others, these are some important factors which make all schemes of rural uplift efforts in the country ineffective.

What is required is the redirection of priorities by mobilising institutional and human resources towards political, economic and civic dimensions. While the government should provide social, legal and economic safety nets, the real focus should be on empowering the people who should organise, plan and execute the programmes at the base level.

Success in the 21st century would essentially rest upon successful blending of centralisation and localisation. Rural folk must be involved in the political system by devoluting power in an appropriate manner at the local levels. The fate of the masses should not be left at the mercy of dynastic political leaders and an administration of narrowly selected civil service. It would be rather impossible to create and sustain powerful constituencies/institutions for change without the courageous leadership from within the masses. The political leadership and elite of the society should seriously think and plan for introducing desired reforms for social and economic changes at the local level.

CONCLUSIONS/FUTURE CONSIDERATIONS

The fruits of rural development efforts have failed to trickle down to the rural masses. The main reasons are: lack of diversification in the rural economy which is a consequence of centralised planning and implementation of development programmes without participation of the common man. This failure can further be attributed to the low pace of human resource and infrastructural development. The process of decentralisation and devolution of power should be carried to the village level if rural developments efforts are to succeed.

The most important task to be undertaken is to change the rural patterns of thought and behaviour, particularly of young men, rather than over-emphasising physical and material dimensions of the rural economy. It may be done by evolving a

human resource development plan capable of redirecting the present elitist education towards value/moral building, technical and operation-based education. There is need to study the distribution pattern of land and income generating resources of rural areas in order to formulate policies helpful in mitigating existing inequalities in their ownership and use. It would be useful to document past performance and the present potential of the rural economy to develop a mutually strengthening working environment for agriculture and non-agriculture sectors in different regions and subregions of the country. This would pave the way for further diversification and generation of employment opportunities in the rural areas.

Last, but not the least, appropriate methods of power decentralisation, tax collection and its expenditure pattern may be developed at national, provincial and village levels to ensure continuous development process in the country.

REFERENCES

- Adams, R. H. Jr., and H. Alderman (1993) Sources of Income Inequality in Pakistan. In A. S. Haider *et al.* (ed.) *Association of Agricultural Social Sciences*. Islamabad, Pakistan.
- Ahmad, B., Munir Ahmed, and Zulfiqar A. Gill (1998) Restoration of Soil Health for Achieving Sustainable Growth in Agriculture. *The Pakistan Development Review* 37:4.
- Ahmad, R., and C. Donovan (1992) *Issues of Infrastructural Development a Synthesis of the Literature*. Washington, D.C.: IFPRI.
- Ahmad, R., and M. Hossain (1990) Development Impact of Rural Infrastructure in Bangladesh. IFPRI, Washington, D. C. (Report 83.)
- Arema (1994) State, Markets and Inequalities 10:1 61.
- Gill, Z. A. (1976) Organisation Functioning and Performance of Cooperatives in Rajana Markaz of Integrated Rural Development Programme. Unpublished M.Sc. Thesis, University of Agriculture, Faisalabad.
- Gill, Z. A., and Khalid Mustafa (1997) Farm-area, Cultivated Area and Irrigated Area Distribution in Pakistan, 1972-90. *Pakistan Journal of Agricultural Science* 34:1–4.
- Gill, Z. A., and Qamar Mohy-ud-Din (1988) Rural Development the Pakistan Perspective. *Journal of Rural Development and Administration* 20:4.
- Hazell, P. B. R., and C. Ramasamy (1991) *Green Revolution Reconsidered. The Impact of High-Yielding Rice Varieties in South India.* Washington, D. C.: IFPRI.
- Johnston, B. F. (1970) Agriculture and Structural Transformation in Developing Countries: A Survey of Research. *Journal of Economic Literature* 8.
- Mustafa, K., and Zulfiqar Ahmad Gill (1998) Cooperatives and Development: Lessons from the Punjab Experience. *The Pakistan Development Review* 37:4.
- Naseem, S. M. (1986) *Underdevelopment, Poverty and Inequality in Pakistan*. Lahore: Vanguard Publications, Ltd.

- Pakistan, Government of (1988) Report of the National Commission on Agriculture. Islamabad.
- Pakistan, Government of (1998-99) *Economic Survey (1998-99)*. Islamabad: Ministry of Finance.
- Pakistan, Government of/FAO/UNDP (1973) Report of the International Seminar on Integrated Rural Development. Islamabad.
- Richard, H. A. Jr., and He Jame (1995) Sources of Income Inequality and Poverty in Pakistan. IFPRI, Washington, D. C. (Report 102.)
- Srinivasan, T. N. (1993) Poverty Alleviation in South Asia. Yale University, U.S.A.
- Wanmali, S. (1992) Rural Infrastructure, the Settlement System and Development of the Regional Economy in Southern India. IFPRI, Washington, D. C. (Research Report 91.)
- Wanmali, S., and Yassir Islam (1995) Rural Services, Rural Infrastructure and Regional Development in India. Washington, D.C.: IFPRI.
- World Bank (1994) *Pakistan: A Strategy for Sustainable Agricultural Growth.* Washington, D. C.: World Bank.

Comments

The authors have written an interesting article on an extremely important topic. They introduced the paper with discussion of the past rural development programmes (RDPs) of Pakistan. They argued that the formulating, planning and implementing (FPI) of RDPs with no input from the rural masses offended the norms of appropriateness, efficiency and effectiveness and thus was the principal cause of their awfully poor performance. Using certain RDPs by politician/privileged groups as means to maneuver political gains, social power and financial benefits is also said to have influenced their FPI. Similarly, ignoring human resource development in the FPI of RDPs has also resulted in continued backwardness of the rural areas. The current crisis of the fall in the productivity of the farm sector has been attributed to the ignorance and illiteracy of farmers and non-development of adequate rural infrastructure to the mode of centralised planning and to the low saving of farmers. The authors ended their article with a plethora of prescriptions for rural development in the country during the 21st century.

It is agreed that the rural sector has been subjected to many RDPs in quick succession. Neither the introduction nor the discontinuation of any programme was determined scientifically. Since the FPI of all the RDPs have been influenced by political expediency, they could not achieve intended alleviation of poverty, ill-health, disease, illiteracy, unemployment, income inequalities, hunger and infrastructure in the country.

Both the political expediency in launching RDPs and their poor performance has been documented in the relevant literature. However, the authors have attributed the current crisis of low farm productivity to non-diversification of farming enterprises leading to intensive crop cultivation and to heavy irrigation which is arguable. The authors held that "the non-diversification of rural economy overpressurised the agriculture particularly the crop production and as a consequence the intensive cultivation of land without conservation of soil fertility and soil structure led to the declining and uncertain production and productivity pattern. It is further aggravated by heavy irrigation without proper drainage mechanism in soils getting alkaline and saline". The current cropping intensity in whole of Pakistan is estimated at best at 100 percent and at 150 percent at the maximum in areas where use of tubewell water with canal supplies and tractor cultivation is on the increase. In fact, the current irrigation canal system permits only 75 percent cropping intensity and enables farmers to meet half of the optimal consumptive water requirements of crops. To argue that land is being cultivated too intensively in Pakistan and has led to a decline in its productivity and that irrigation has aggravated it further is hard to support empirically.

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The authors have remarked that "the excessive dependence on agriculture has created a culture of *excessive and indiscriminate use of fertilisers and pesticides* and made agriculture economy vulnerable to all sorts of fluctuations". This again reflects the lack of true knowledge of real facts. Exceptions notwithstanding, use of fertiliser is like cropping intensity and irrigation water significantly lower than the desirable level. The use of pesticides also cannot be regarded indiscriminate.

To the authors, the remedy for the rural development dilemma lies in the involvement of the masses in the FPI of the RDPs and in encouraging rural diversification. However, the style of diversification suggested is only partially consistent with the weather conditions, resource endowments, technical know how and infrastructure obtaining in the rural areas. While the authors seem to be aware of the occurrence of surplus labour as a consequence of agricultural/rural development and the desirability of retaining it in rural areas, they do not seem to know how to achieve it. In fact, they have failed to appreciate how increased irrigation can create employment opportunities in rural areas by enabling farmers to increase cropping intensity and cultivated area, and adopt input-intensive cropping patterns.

The human resource development (HRD) needs to be accorded top priority in FPI of the RDPs. However, the author's view of HRD seem to be extremely limited. According to them, increased access to a job oriented education system constitutes HRD. This is only one requirement of it. The efforts at enhancing literacy need to be dovetailed with increased access to better nutrition, modern health services, on-the-job training and growing opportunities of advancement and freedom for promotion of HRD. Further, the role of increased component of vocational and technical education also needs to be appreciated for improving the prospects of employability of manpower.

While wanting to highlight the supreme importance of proper planning for HRD, the authors have contended that Pakistan is not poor in manpower, talents, planning expertise and institutions of R&D. I have my reservations. Scientifically and technically trained manpower is not in abundant supply; highly educated individuals do not constitute more than 3 percent of the population; planning expertise has miserably eroded and institutions of R&D are virtually in shambles. There is no justification for such a complacency. Rather, there is a need to be realistic.

The provision of adequate infrastructure as the next strategy suggested for rural development in the next century is inevitable. Yet it is strange that the authors hold that "one major reason for slow pace of rural development is the poor capital formation in rural areas as a consequence of limited access to financial institutions". To advocate such a link is highly unjust, if not preposturous on their part. Such a wholesale superimposition of borrowed alien ideas on the indigenous rural setting will be dangerous. Rural savings have all along been invested in urban areas. Additional rural banks and other financial institutions can increase rural savings. But

rural infrastructure cannot develop if rural savings continue to be invested somewhere else. The need is to legislate measures to ensure equitable investment in rural areas. The rural sector must get additional investment in its own right. Over the years, not more than 3.4 percent of the entire public sector development allocations have been made in rural areas. The authors point to the desirability of developing rural infrastructure but they are unable to order the priority.

I would conclude my comments by arguing that the article has not been attempted on lines of a rigid scientific method of research. No precise identification of an empirically verifiable statement of the researchable problem has been made. There is no analytical method or framework given to estimate any policy-relevant variables to establish their relationship with outcomes. The paper is a narration of events followed by a range of prescription excessively loaded with value judgements and normative assertions. I only wish the authors had utilised their energy and time in undertaking research on lines of scientific research method. Further, there was the need not to loose sight of realities on the ground. Knowledge of recent numerical data and research is inevitable for one to be on a safe wicket.

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