



GOVERNMENT COLLEGE
ECONOMIC JOURNAL

VOLUME X

SUMMER 1977

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ECONOMIC
1977
08

DEPARTMENT OF ECONOMICS
GOVERNMENT COLLEGE, LAHORE - PAKISTAN

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GOVERNMENT COLLEGE
ECONOMIC JOURNAL

Is produced half yearly during January—June and July—December by the Department of Economics, Government College, Lahore. The views expressed are the personal responsibility of the authors and the Department accepts no responsibility for them. Correspondence relating to contributions should be addressed to the Editor and that relating to business matters to the Manager. Contributors should give prior notice in case reprints are required.

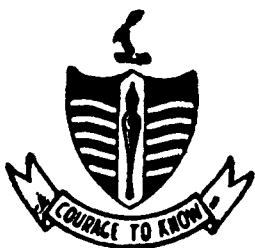
Subscription Rate
(For 2 issues)

Pakistan : Rs 20.00
Foreign : \$ 5 00

Composed by : Hafeez and Brothers

Published by : Mr. Zaheer-ud-Din Malik, Manager, Economic Journal, Government College, Lahore.

Printed by : University Tutorial Printing Press, Aibak Road, Anarkali, Lahore.



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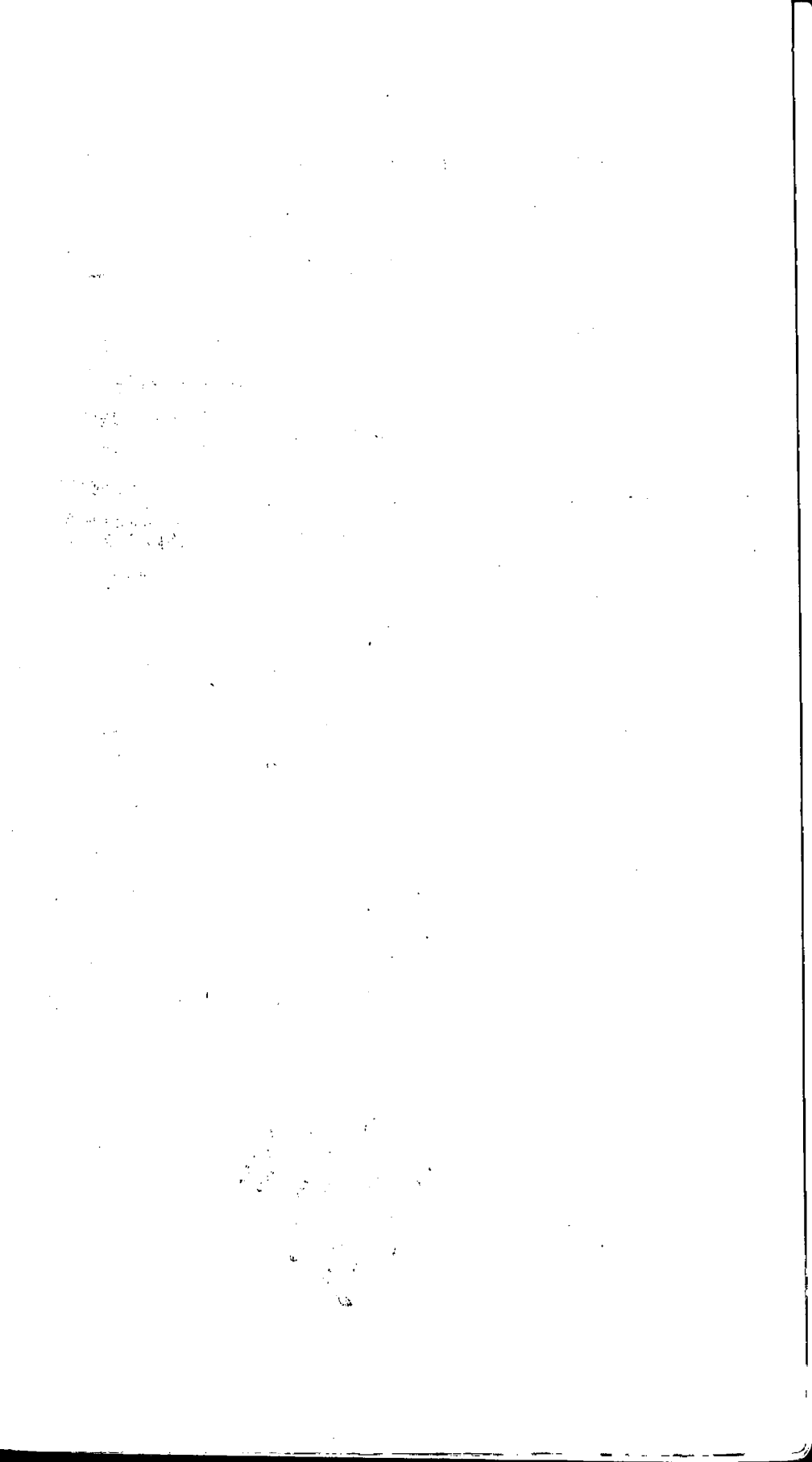
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Marginalization as a Social Constraint for the Adoption of Agricultural Innovations in Pakistan

Dr. Haider Ali Chaudhari*

"From a social perspective until our day, human society has never existed¹. The contemporary world will not be primarily remembered for its nuclear explosions and taming of nature, but probably due to the fact that in this crucial era the world has broken up, and the institutions of the modern world such as communication, schools, political parties etc. have provided the basis of collective entity to the human race to feel concerned for each other in a global perspective. One of the more dramatic changes which has occurred in the world economic and political relationships in the past two years is the success of the developing countries in shifting the subject of their poverty from the periphery of world affairs to the centre. Their accomplishment has many causes including the use of their numerical preponderance and voting solidarity to ensure that their cause heads the agenda of all inter-governmental meetings.²

Extensive literature has been produced by international organizations and scholars of various countries which depict imbalance in growth rates expressed in concepts like 'a divided world' or the 'ever-widening gap' between the rich and the developing societies. Not only between countries, but within a society, the disparities in different segments have been increasing. The unprecedented population growth and the slow development of technological base in the developing countries have drawn attention of the policy makers and the scholars for scientific analysis.

Poverty, a multidimensional variable is the main economic characteristic of the developing countries and it works in a vicious circle. For instance, inadequate diets lead to physical weakness and

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1. Worsely, Peter, *The Third World*, London, 1964, p. 1.

2. Warely, T.K. *Agriculture in International Economic Relations*, A.D.U., New York, Reprint No. 29, February 1977, p. 15.

susceptibility to disease, hence to low levels of labour inputs to all activities including agriculture, hence poor returns from agriculture and poor diets³. Hence, to combat poverty a multi-dimensional approach has to be adopted.

The present paper is under taken to analyse basically the social consequence which have resulted due to the introduction of agricultural innovations in the socio-cultural setting of Pakistan. This phenomenon more specifically stated as the "Green Revolution" denotes increase in crop yields that in recent years have resulted mainly from the development and adoption of "Miracle Seeds" and the improved technology associated with these innovations.

Broadly speaking for the introduction of new agricultural innovations from the social development point of view, three main factors may be kept in view. These are :

1. What are the personal and physical characteristics of the farmers and the farming communities and their institutional and organizational structure where innovations are to be introduced.
2. What are some of the social and economic implications of the main findings obtained through the introduction of agricultural innovations.
3. What useful lessons can be learnt for broad generalizations and policy suggestions so that the experience gained so far becomes more meaningful and relevant for shaping the future course of development.

The above stated factors are taken up one by one in the ensuing discussion.

I. The Farmers : Institutional and Organizational Constraints

Historically speaking, the Pakistani farmer is an extremely hard working individual but also an introvert. His surroundings, the village communities have been inward looking communities with little outside contact with rare opportunities for diffusion of ideas from outside. In fact, the inter-village communication was so low that

3. Goldthorpe, J.E. *The Sociology of the third World : Disparity and Involvement*, Cambridge University Press, Cambridge, 1975, p. 92.

every village was a little estate, self-sufficient within its own environment, resisting all outside influences. The fear of the unknown was a pre-dominant value.

In contrast to the pre-industrial concept of resistance to change and unwillingness to take risks, the emerging trait among the Pakistani farmer is his readiness to consider and accept change in general. If the farmer does not respond positively to change, his behaviour might be explained by (a) *Ignorance*—the farmer does not know what he can do other than what he has been doing in the past ; (b) *Inability*—the farmer knows what he could do but is unable to do it for various socio-economic reasons ; and (c) *Unwillingness*—the farmer knows what he should do and can do it, but he does not want to do it. Objectively speaking, certain cultural values and attitudes prevent him⁴.

One of the serious impediments to the introduction of new agricultural innovations has been the concentration of land ownership among the big land owners. According to the Pakistan Census of Agriculture, 1972, two-thirds of the farmers owned less than 12.5 acres of land which was only 30 per cent of the total farm area in the country. It may be mentioned here that 12.5 acres is the subsistence level of holding for an average farm family. In contrast only 11 per cent of the farmers owning 25 acres or more owned over 40 percent of the farm area. This would depict the institutional constraint under which the small farmers have to work.

Here, without going into the finer technical distinctions between the marginal and the small farmers, these concepts have been used with identical meanings to include those peasants who are hovering at the poverty—line and at the level of low economic viability. These small farmers and marginal farmers form a large number ; indeed they are the core of the farm population. Their number runs into millions.

Needless to state that in 1972⁵ the Land Reforms applied a drastic cut on individual ceilings of maximum holdings from 500 acres

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4. Oatello, Gelia T. *All in a Grain of Rice : The Review of Philippines Studies on the Social and Economic Implications of the New Rice Technology*, South East Asian Regional Centre for Graduate Study and Research in Agriculture, 1975, p. 48.
 5. Dettmann, Klaus "Agriculture in Pakistan—Its Foundations and Potential", Applied Science and Development Institute for Scientific Cooperation, Tubingen, Federal Republic of Germany, Vol. 7, 1976 p. 100.

to 100 acres in the irrigated and from 1000 to 300 acres in the non-irrigated areas. According to the Government sources, the land resumed upto november, 1976 was 3.3 million acres, out of which 1.4 million acres have been distributed among 1, 31, 272 landless tenants.

Under the new Land Reforms now even the cost of seeds and irrigation water charges are to be paid by the land owners and the cost of remaining inputs has to be shared equally between the land owners and the tenants. Fragmentation of holdings has also been a serious problem of agriculture in Pakistan.

It has been proverbially mentioned that the peasants in this part of the world are born under debt, live under debt and eventually die under debt. Inadequate resource base at the local level has been responsible for low productivity and making socially and economically the life in the villages less attractive with the resultant implications of out-migration towards the cities. The Government scheme to establish the 'Agrovilles' to retain the redundant rural manpower in the Trade Centres near the place of their origin is not off the ground as yet.

The exploitive and non-egalitarian social structure in the village has been mainly responsible for reducing the risk taking potential for the majority of the people. It is true that the Land Reform measures have generated interest on the part of Absentee land lords, largely out of fear that their tenants might otherwise be accorded proprietary rights to the land.⁶ But no real impact of the Land Reforms has been felt so far.

II. Adoption of Agricultural Innovations : Implications

The introduction and the adoption of agricultural innovations in Pakistan have perplexed the social scientists. For the adoption of wheat which is the main food crop, the total acreage under high yielding varieties during 1974-75 went up from 8.6 million to over 9 million acres or 5.86 percent over the previous years. The highest since 1970-71, and higher than in 1972-73 and 1973-74 combined, the high yielding varieties acreage during 1974-75 occupied 33 per cent of the total area and accounted for 78 percent of the total production

⁶ Nulty, Leslie *The Green Revolution in West Pakistan : Implications of Technological Change*, Praeger Publications, New York, 1972, p. 32.

with an average yield of 17.7 mds*/acre.⁷ The most rapid adoption of new wheat seed has been in the Province of the Punjab.

Even for the *barani* (rainfed) areas the high yielding wheat varieties were being grown on about 20 per cent of the land. According to the estimates by Campos during 1974-75 in the Punjab, the high yielding varieties in the *barani* areas increased 40 per cent over the previous years. In the N.W.F.P. they have moved earlier and faster than in the Punjab occupying over 32 per cent of the area in 1974-75.

To quote a specific example, in the Mona Reclamation Experimental Project with additional supply of water through the installation of tubewells and adoption of new varieties of seed in wheat, the yield per acre went upto 20 maunds in 1974 which had considerably gone up, i.e., 23 maunds per acre in 1975-76. Needless to say that even on irrigated farms in that area in 1965-66 the average yield of wheat was only 14 maunds per acre.

For rice, Government price policy was the most important factor influencing the adoption of high yielding varieties. The objective of the Government has been to maximise foreign exchange earnings and thus the increase of support prices to maintain Basmati production was consistent with this objective.

During the last 10 years the installation of private tubewells has played a significant role for increasing agricultural productivity. The cropping intensity was 100 per cent when reclamation activities were started in the Mona Area in 1965-66. In a period of ten years (1975-76) the cropping intensity has gone upto 130 per cent. Other factors remaining the same, the most singular factors for the development of this region has been the additional water supply through tubewells. Table 1 substantiates the point which has been mentioned above.

Fertilizer is an important variable to increase productivity. It has been estimated that a good farmer can obtain 7 to 10 times additional grain compared to the weight of the nutrient fertilizer applied in the wheat field provided that other factors are not limiting the production, that is, the variety should be high yielding, the land properly prepared and the planting done in time and properly.⁸

*A maund is about 82.27 lbs.

7. Campos, Armondo, *Wheat Improvement Production in Pakistan* Ford Foundation, Islamabad, June 1976.

8. Campos, Armondo, *op cit.* p. 27.

When about 16 years ago the chemical fertilizers were introduced in the country the farmers were reluctant and hesitant to use them. It has been observed now that the total fertilizer consumption in 1974-75 increased 54 per cent over the Rabi season of 1973-74 from 150,000 to 231,400 nutrient tons and with improved N:P ratio of 5.2:1. Again during 1975-76 the total consumption jumped 18 per cent over the 1974-75. During the last two years, 1974-75 and 1975-76 total fertilizer consumption for the wheat crop increased 82 per cent over the 1973-74 consumption figures. Objectively speaking, the trends in fertilizer consumption are encouraging but not satisfactory.

To encourage mechanization during the recent years Government has allowed liberal imports of tractors and some institutional changes were brought in for the sale and distribution system of tractors to provide free access to the farmers this facility. During 1976-77 15000 tractors are expected to be imported against 10809 tractors imported last year. To quote the figures obtained from the Mona Reclamation Experimental Project on the basis of a study conducted in six villages, it was observed that cropping intensity was 125.1 and 130.5 per cent on non-tractor and tractor operated farms respectively, indicating thereby that the latter category was able to grow crops on 5.4 per cent additional area. The net income per cultivated acre was Rs. 384/- and Rs. 203/- on tractor operated and non-tractor farms respectively. It was also observed that the yields per acre of sugarcane, cotton, wheat and garden crops were on the average 4.0; 6.0; and 8.0 per cent higher on tractor operated farms as compared to the non-tractor farms.⁹

According to another study,¹⁰ tractors introduced into areas of the Punjab where sweet ground water was available earned a rate of return approximating 40 per cent.

While looking at the problem from another perspective it has been observed that the biological/engineering innovations introduced in this country have been described as class and location specific.

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9. Hussain, Mohammad, *Extent of Utilization of Tubewell Water with and without cultivation in Mona Project Area (1970-71)* Directorate of Mona Reclamation Experimental Project, Master Planning and Review Division, Mona Colony, Bhalwal November, 1974.
 10. Ahmad Bashir. "The Economic of Tractors Mechanization in the Punjab—Pakistan" *Food Research Institute Studies*, Stanford University, Standard, California, USA, Vol. XIV, No. 1, 1975 p. 63.

Adoption studies in Pakistan have indicated that the adopters own larger farms, have more formal education, participate more in formal organizations, have more social contacts and higher incomes. This supports the hypothesis that the societies where the distribution of land is more egalitarian, marginality or smallness is not accompanied by domination or discrimination. However, in societies where a large majority of peasants makes a subsistence living, as is the case in most of the developing countries, a built-in inferiority mechanism exists and the small peasants do not fully participate in the development process of the economy. Researches have also indicated that small farmers lack the time, political power and other requisite socio-economic characteristics to enable them to be benefitted by the Government sponsored programmes of action.

In a recent study of adoption of new rice varieties in Gujranwala area in the Punjab, the author had observed that out of 1929 rice growers, only 180 were cultivating IRRI varieties. The average size of the adopters was about six hectares as compared to only 1.3 hectares for the non-adopters.

In 1971 Rochin in West Pakistan observed a tendency for farmers with larger holdings to have had greater access to credit and water and greater contact with extension workers; these farmers were likely to have received the economic advantage of being among the first to have used the new varieties. Gotsch had also documented the differential access to the new technologies particularly tubewells—that permit Pakistan's larger farmers to acquire the appropriate inputs while smaller either do without or use water and other costly inputs at sub-optimal levels.

In another study by the University of Agriculture in the Shadab Project near Lahore, it was observed that small farmers were fertilizing their cropped area at the rate of 63 nutrient pounds per fertilized acre. This came to 20.5 nutrient pounds per cropped acre. While on the other hand, big farmers (with holdings above 25 acres) were fertilizing 70 per cent of their cropped area at the rate of 91 nutrient pounds per fertilized acre and the average doze per cropped acre worked out to be 66 nutrient pounds.

In another study by the author and his colleagues in four rural communities of Sialkot district, it was observed that the small farmers were *localite* in nature and they would generally be not the innovators

for the introduction of agricultural innovations.¹¹ The results supported the findings of Wilkening (1952), Lindstorm (1958), Inayatullah (1962), Razzaq (1963), Bajwa (1965), Chaudhary (1966), and Cheema (1971)¹² who in their respective studies revealed that the informal personal media (farmers of the same village, farmers of another village, friends and relatives) were most frequently used for the adoption of technological innovations in agriculture.

In another study of two villages in Faisalabad where the relationship between the density of population in the village communities and the rate of adoption of agricultural innovations was sought for, it was observed that the adoption of agricultural innovations was higher in the densely populated community as compared to the sparsely populated area. This would suggest that population pressure may act as a stimulant for people to find new ways to improve their level of living.

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11. Qureshi M. Akbar and Chaudhari, H.A. "Adoption of Technological Innovations by Small Punjabi Farmers", a paper submitted for publication, Department of Rural Sociology, University of Agriculture, Lallpur, 1977.
 12. Wilkening E.A. 1952. Acceptance of Improved Farm Practices in Three Coastal Plain Countries. North Carolina Agricultural Experiment Station 98 : 161-165.

Lindstorm, D.E. 1958. Diffusion of Agricultural and Home Practices in a Japanese Rural Community. R. Sociology, 23 (2) : 81.

Inayatullah, 1962. Diffusion and Adoption of Improved Practices Pakistan Academy for Village Development, Peshawar, Research Report No. 6.

Razzaq A.A. 1963. "Evaluation of Communication Media on Agricultural Extension and Farmers Knowledge about Them". M.Sc. Thesis, Department of Agri. Extension, WPAU, Lyallpur.
 Bajwa, I.A. 1965. Characteristics and Role of Local Leaders in the Diffusion Process in Two Rural Communities of Sialkot District. Research Studies I, WPAU., Lyallpur.

Chaudhary, A.A. 1966. Sources and use of Agricultural Information by Low Income Farmers in Two Rural Communities of Toba Tek Singh Tehsil, District Lyallpur : M.Sc. Thesis, Deptt. of Rural Sociology, W.F.A.U., Lyallpur.

Cheema, S.B. 1971. The Role of Information Sources in the Adoption of Improved Agricultural Practices by the Farmers of Toba Tek Singh Tehsil, District Lyallpur. M.Sc. Thesis, Department of Rural Sociology, U.A., Lyallpur.

In a Board of Economic Enquiry study¹³ of 360 farmers of ten districts of the Punjab, those farmers who had more than 150 acres of land, all of them were using improved sowing implements; 92 per cent were using improved seeds, and fertilizers. In contrast, those farmers who had subsistence holdings of 12½ acres or less, 57 per cent were using the improved seeds; 72 per cent were using farm yard manures and fertilizers and only one-third had the sowing implements. This suggests that the farmers with larger holdings are in a better position to take economic risks.

Recently several studies have been put out by the United Nations Research Institute for Social Development, Geneva, on the different aspects of introduction of new agricultural technologies in the developing countries, which indicate certain relevant implication in our context.

Bhati while studying the social and economic aspects of the introduction of new varieties of paddy in Malaysia¹⁴ has primarily confirmed the findings of studies conducted in Pakistan so far. He argues that the farmers who have benefitted more from the 'Green Revolution' had larger farms, more technical know-how, better seeds, earlier access to institutional cheap credit and other resources. Small farmers and tenants who constitute a large proportion of farming population seemed to have lagged behind. They had not been able to fully exploit the potentials of the high yielding varieties. He has concluded that although the incomes of the paddy farmers have generally increased, the disparities in their income levels have also widened. Clearly, the benefits of the high yielding variety programme have not been shared equally by all farmers.

Similarly in Indonesia Palmer¹⁵ has observed that the new potential profitibilities offered by the 'Green Revolution' acted as a catalyst by tempting those who had access to land to rationalize their production methods in such a manner as to maximize monetary

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13. Qazi, Z I. *Grooming the Punjab Farmers for a Green Revolution* The Punjab Board of Enquiry, Lahore, 19 5 pp. 20-21.
 14. Bhati, U.N. "Some Social and Economics Aspects of the Introduction, of New Variety of Paddy in Malaysia" United Nations for Research Institute for Social Development, Geneva, 1976.
 15. Palmer, Ingrid. *The New Rice in Indonesia*, United Nations Research Institute for Social Development, Geneva, p. 165.

gain to themselves even if this meant turning their backs on traditional behaviour patterns. Even in the home of 'Green Revolution', in Mexico¹⁶ it has been argued that agricultural modernization has ultimately led to urban and not to rural development. The technologies employed have been adopted to the needs of agricultural entrepreneurs, not peasants, and the institutional structure regulating the exchange of goods and services between hinterland and metropolis unsuited to encouragement of consistent contributions by small peasant holdings to national growth.

For the Philippines from where the 'miracle rice' originated, Castillo¹⁷ argues that while the miracle rice offers tremendous potentialities for rice crop, to the subsistence farmers it would probably remain a potentiality atleast for the immediate future. This she believes that the miracle rice requires much inputs, skills and environmental controls to enable it to perform its miracles and the subsistence farmer has little of these requisites.

Similarly some studies in India have indicated that the effects of of the 'Green Revolution' seemed to have increased existing inequalities of income distribution in favour of larger land owners.

III. Conclusions

One obvious conclusion from the above discussion is that, the past Governments have had a paternalistic attitude and policies toward the big land owners. The technologies, more so on the engineering side were those which were not within the reach of the common man. The big fish has tried to gobble up, all the developmental aids and even the small fish. The 'Trickle Down' theory, which assumes that the benefits going to the big farmers will automatically trickle down to the under-privileged people has in fact given rise to the 'Evaporation Theory.' Therefore, it is becoming evident that the rural poor is becoming poorer than before.

The humane approach which has been adopted more recently with social justice objective in view is resulting into commercialization of

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16. Hewitt de Alcantara, Cynthia. *Modernizing Mexican Agriculture Socio-Economic Implications of Technological Change 1940-1970*, United Nations Research Institute for Social Development, Geneva, 1976 p. 305.
 17. Castillo Gelia T. "A New Look at old Concepts in Development", *Solidarity*, Vol. 3, No. 5, May, 1968, p. 14.

agricultural sector which would ultimately provide incentive for the common man to relieve himself from the patronage of the landlords and strive for a more egalitarian social structure.

There could be two possibilities which may exist: the political vacuum which is created in the rural areas through the lessening of the landlord influences can either be exploited by a neo-feudal class or government steps in as the custodian of the common man and create social institutions at the local base to serve the interest of the majority.

Through the creation of the unified Ministry of Social Welfare, Local Government and Rural Development, it can be hoped that the rural level institutions will be strengthened.

The pricing of agricultural inputs/innovations should be such that the adoption of such innovations/inputs is profitable for the common man. It must be realized that the risk taking potential of the common farmer is very low, therefore, the demonstration models which are intended to create an impact on the common man should not be efforts of trial and error.

Although the formal institutional sources like the extension services play a very crucial role to create awareness about agricultural innovations, yet the adoption patterns manifested by the villagers show that they are still primarily motivated by the *localite* sources of information in whom they repose a confidence. Village level institutions which can create credibility with the farmer while offering a package of improved agricultural innovations with proven economic profitability and which are compatible with the cultural values of the traditional farmers will have a high degree of acceptability.

The creation and utilization of agricultural technology has to ultimately end up as a social and human problem. It has been rather unfortunate that for the extension of knowledge about agricultural innovations so far we have not adopted a social or a *human* approach. So far we have adopted a technocrat's approach to view increase in productivity as positively leading to general happiness. It is rather pathetic to acknowledge that not a single rural sociologist is working in the Department of Agriculture to analyze the social implications of adoption of innovations.

The feasibility studies on the transfer of technology from the technical point of view should be supplemented with intensive research

efforts to assess the psychological, social, economic and cultural impediments which retard the acceptance of innovations. Our knowledge about the *man* who is the ultimate user of technology is so limited at this stage that generalizations about his behaviour patterns could be misleading. It is believed that cooperative research undertakings between the plant and social scientists would enhance the economic profitability and social acceptability of agricultural innovation in Pakistan. Agricultural research institutes must give priority to developing a package of innovations that are within the farmer's resources and competence.

With no intension to annoy change agents working in agricultural extension, I am tempted to mention that transistor radio has been the most potent instrument for creating awareness about agricultural innovations in Pakistan. A decade ago, probably less than one-third of the farmers were using any chemical fertilizers, and more than two-thirds of them did not know even about the availability of improved seeds. Today, over 90 per cent of the farmers are using to some measure, the chemical fertilizers and also the improved seeds, especially the wheat seed. The credit must be given to radio and its agricultural programmes for educating the rural communities about new innovations but the final adoption has been achieved through the verification by individual farmers from personalized, non-institutionalized sources of information.

The present regime has indicated its determination to introduce *Panchayat System* (the Council of Elders) in the villages, which has been tried in the sub-continent in the earlier years as well. We are entering into another era of experimentation for rural uplift. The past experience has shown that in several states of the undivided India statutory *Panchayats* were established in every village. The *Panchayats* were administratively linked-up with the District Boards and the District Community Councils. Villages in this part of the world, have always been manifesting heterogeneous characteristics with strong factions on the basis of caste, kinship or *Biradari* (common ancestral lineage). Empirical evidence supports the hypothesis that wherever there were less factions, and the opinion leaders were impartial, the *Panchayats* had worked well. In the Province of the Punjab, especially the *Panchayats* had almost every where failed to administer the villages. The main reasons were the lack of supervision or the little knowledge on the part of supervisors to train the opinion leaders for

a system of self-government. Moreover, the *Panchayats* were used as a judicial organizations and not as administrative bodies. In addition, it may be pointed out that the *Panchayats* were not introduced according to the felt-needs of the people.

The small or the marginal farmer in the traditional societies like Pakistan would not change their behaviour patterns until they change their wider attitudes towards life and society. The *Panchayats* have to function as a process of self-government, but such institutions must not alleviate the majority of the small farmers from their traditional society. As the basic aim of such a system is to give the village a voice in its affairs, discussion would necessarily have to be substituted for dictation. An experiment for rural development has been conducted in Senegal under the caption of "Rural Animation", which is being replicated in some other developing countries as well.

Animation's (same as in the case of *Panchayats*) originality lies in its insistence on finding the leadership for innovation within traditional village society. It works through the local power structure, not against it, for it is the village's decision makers who pick the animator (the *Punchs*) and then decide what projects, if any, they will undertake. Ideally the animators or the village *Punchs* should represent the village to the government, and not the government to the village.¹⁸

To provide further impetus to the adoption of agricultural innovations in the rural communities by the small marginal level farmers, the local *Punchs* or opinion leaders must be trained by the extension staff. Careful selection with adequate representation to the various segments of society in the village *Panchayats* will have acceptability who will be the in-groupers and their opinions would influence the dissemination of innovations. The primary responsibility of the extension staff should be to work *with* the local opinion leaders rather than *for* them because the people have to be the *subjects* and not the *object* or *targets* of change,

In the words of a scholar¹⁹ who has studied comprehensively the phenomena of Green Revolution in the Indo-Pakistan sub continent,

18. Borton, Raymond E. (Ed) *Getting Agriculture Moving*, Vol. I, Agricultural Development Council, Inc., New York, 1966, pp. 315-325.
19. Sen, Sudhir. *A Richer Harvest New Horizons for Developing Countries*, Tata McGraw-Hill Publishing Co. New Delhi, 1974, p. 313.

the need for the present is to resource-based development, with maximum concentration on science-based agriculture backed by credit-based financing, and nationwide linkages tying farms and villages to markets, towns and cities. This we have experimented in the form of Integrated Rural Development Programme. It is beyond the scope of this paper to present an extensive analysis of this programme, but suffice here to state that the Programme has failed to provide the administrative and organizational linkages between the functionaries of the Nation Building Departments and the rural masses. Leaving aside the political expediencies, as a potent tool for social and economic development whether it is the I.R.D.P. or the *Panchayat* system, it must aim at reducing the gap between the *have nots* and the *have lots* in the rural areas through the introduction of agricultural innovations.

TABLE 1

Cropping Intensities of Tubewell and Nontubewell Farmers by Size of Farm, West Pakistan (Punjab), 1967*
(figures in percent of cultivated area)

Farm Size (in acres)	Tubewell Farmers			Nontubewell Farmers		
	Summer	Winter	Total	Summer	Winter	Total
Rice area						
less than 12.5	70.5	72.8	143.3	55.6	79.2	143.8
12.6—25	78.9	73.9	152.8	40.9	63.8	104.7
25.1—50	77.1	67.7	144.8	39.9	60.2	100.1
above 50	53.0	70.2	123.2	44.2	50.4	94.6
Cotton area						
less than 12.5	70.6	59.1	129.7	51.0	48.4	99.4
12.6—25	57.6	47.5	105.1	39.2	38.6	77.8
25.1—50	63.5	61.5	125.0	38.1	42.2	80.3
above 50	64.4	47.1	111.5	37.9	30.7	68.6
Both areas						
less than 12.5	70.5	66.2	136.7	53.9	64.9	118.3
12.6—25	67.6	62.9	130.5	39.9	50.4	90.3
25.1—50	69.0	64.0	133.0	38.8	49.6	88.4
above 50	59.4	57.2	116.6	40.1	37.8	77.8

*Hiromisu Kaneda and Muhammad Ghaffar, "Output Effects of Tubewell on the Agriculture of the Punjab: Some Empirical Results", Pakistan Institute of Development Economics Research Report No. 80 (Karachi, March, 1969). Table 2, p. 8 (Mimeographed). From data collected by the 1967 Pakistan Institute of Development Economic Survey.

PROBLEMS OF PUBLIC ENTERPRISES IN PAKISTAN

*Khawaja Amjad Saeed**

Broadly speaking, the public sector in Pakistan, by the end of 1971, comprised Industry and Fuel (Oil and Gas Development Corporation, Wah Ordinance Board and Wah Industries Limited); (Water and Power Development Authority and Karachi Electric Supply Corporation); Transport and Communications (Pakistan International Airlines Corporation, Karachi Port Trust and National Shipping Corporation); Agriculture (Agricultural Development Corporation and Rural Supply Credit Corporation); Credit (International Development Bank of Pakistan, Pakistan Industrial Credit and Investment Corporation, Agricultural Development Bank, House Building Finance Corporation, National Bank of Pakistan and State Bank of Pakistan); Regional Development (various development authorities and miscellaneous aspects covering Pakistan Insurance Corporation and Pakistan Council of Scientific and Industrial Research etc).

Bim Enterprises

With a view to implementing the manifesto of the Pakistan Peoples Party which came to power on December 20, 1971, the Government of Pakistan took over 32 industrial units and nationalised them under the Economic Reforms Order, 1972. These industrial units alongwith the projects under the Pakistan Industrial Development Corporation, already a public sector undertaking, were grouped into ten functional corporations and handed over to a Board of Industrial Management (BIM) to coordinate and supervise the activities of all the corporations, one being a non-manufacturing organisation, which are responsible for the management and control of 56 industrial units. The details are as under :

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TABLE I

List of Corporations Under BIM

Name of Corporation	Units
A. Working Corporation	
1. Federal Chemical and Ceramic Corporation Ltd.	13
2. Federal Light Engineering Corporation Ltd.	7
3. National Fertilizer Corporation of Pakistan Ltd.	3
4. Pakistan Automobile Corporation Ltd.	9
5. Pakistan Tractors Corporation Ltd.	1
6. Pakistan Industrial Development Corporation	7
7. State Cement Corporation of Pakistan Ltd.	8
8. State Heavy Engineering and Machine Tool Corporation Ltd.	3
9. State Petroleum Refining and Petro-Chemical Corporation Ltd.	1
B. Service Corporation	
10. National Design and Industrial Services Corporation Ltd.	1
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Source : Annual Review 1975-76, Board of Industrial Management p. 4

* Upto March 31, 1977 the number had gone upto 56. These corporations, managed by BIM, are playing significant role in creating a nucleus of basic and heavy industries, thereby providing a solid base for future development.

Achievements of BIM

According to its 1975-76 report the main achievements of BIM have been as follows :

1. Aggregate physical production increased by 4%.
2. Sales increased from Rs. 4.69 billion (\$0.47 billion) in 1974-75 to Rs. 5.0 billion (8.50 billion) in 1975-76.
3. A sum of Rs. 1,331 million (\$133 million) was contributed to the Government exchequer in the form of corporate tax, sales-tax, capacity tax, import duty, excise duty and other taxes. The corresponding amount was Rs. 1214 million (\$ 121 million) in 1974-75 and Rs. 667 million (\$ 66.7 million) in 1973-74.
4. Compared to 54,049 personnel of all categories in State Enterprises, this figure was 57,823 towards the end of 1975-76.
5. The Caustic Soda Expansion Plant at Gharo was commissioned in 1975-76 when Larkana Sugar Mills and People's Steel Mills also went into commercial production.

Later on, in December 1976 the Federal Minister for Production recounted the following achievements of BIM enterprises :

1. During the past four years production went up by 70%.
2. Losing companies were turned into profit-making concerns.
3. During the past five years, the duties and taxes paid by these industries increased 700%.
4. In the next five years, a sum of Rs. 56 crore (\$ 56 million) was expected to be generated from the nationalised sector's own resources.
5. Labour was given a better deal.
6. BIM exports from heavy engineering registered a big increase (100% in 1975-76.)

Major Problems

An attempt will now be made hereunder to review, in broad terms the major problems of BIM State enterprises with suggestion for improvements.

Labour Productivity

Besides the attainment of economic and social objectives, envisaged for public enterprises, the basic criteria for evaluating their performance is the achievement of physical targets laid down during a given period and their steady increase with the passage of time. On the time basis of its four annual reviews the production of BIM enterprises was as follows :

TABLE 2
Increase in Production in BIM Enterprises

Year	Percentage increase over corresponding previous year
1972-73	18
1973-74	31
1974-75	22
1975-76	4

Source : Annual Reviews 1972-73 to 1975-76 BIM.

According to the Pakistan Economic Survey 1976-77, the percentage increase in the physical production for the first nine months, i.e., July 1, 1976 to March 31, 1977 was 2.4%.

From the foregoing analysis, it would be clear that since 1974-75, steady decline in physical production is turning out to be the main problem area.

In some cases, such as steel and automobile industries, only a single shift is being worked. In order to reduce the fixed cost component per unit, it is, therefore, essential that double or triple shifts are introduced in these industries. This would not only provide more employment opportunity, it would also bring a greater relief in the shape of bigger volume and lower prices.

The Labour Policy enforced in 1969 had emphasised that in future no wage raise should be allowed unless it was linked with productivity. Unfortunately, this golden principle has not yet been implemented.

A debate is still going on for defining 'productivity standards' and laying down conditions for establishing their relation with salaries and wages. It would be stressing the obvious to repeat that this is an

area which requires urgent attention of our planners for an expeditious decision.

A regular feature of BIM management is to pay attendance allowance and production bonus to its workers. The need is to universalise this incentive. It would encourage higher production which in turn would have a softening effect on the price level.

The labourers should also be provided training by their employers in the field of industrial and behavioural sciences. For this purpose, training centres should be set up where the labour force could sharpen their skill and working efficiency. The labourers also need training to learn better use of raw materials and avoid wastage of inputs like gas and electricity. It has been observed in a number of situations that improper planning and lack of coordination sometimes results in tremendous loss to industrial concerns. It is, therefore, essential that coordination between various segments of public sector receives top priority. A little shut-down in basic industries, whether due to labour negligence or power failure or shortfall in supplies results in great loss to industrial concerns. Much of this loss could be cut down if labour - management relationship is improved and better coordination is ensured between different departments and sections.

Cost Reduction Techniques

At present, the cost accounting concept with BIM seems to be to account for costs after they have been incurred. This is an obsolete concept and might be changed to "what a cost would or should be". Unfortunately there is hardly any organisation in the country which could claim that its cost structure was representative of the situation or environment. It is suggested that an independent organisation of Professional Cost Accountants be created which should work along with the BIM management to work out the cost structure applicable to various industries and carry out further research to find out ways and means to reduce cost. The standards thus established by the Professional Body of Cost Accountants should be used as basis for tax levy with certain allowances for changes in the environment and prevailing conditions.

In Pakistan, as in some of the other less developed countries, due attention is not being paid to cost reduction techniques. This is mainly due to the shortage of qualified Cost Accountants. The Institute of Cost and Management Accountants of Pakistan is playing

its role in this respect, but it has yet to succeed in meeting all the needs. The author and Professor Zaheer Ahmad Butt of the Department of Business Administration, University of the Punjab, Lahore, are currently busy in developing course material for Work Improvement Cost Reduction (WICR). One feels that this technique would go a long way in filling the gap. It would also be helpful if the ESCAP undertakes a research study in this respect and develops a cost reduction technology for the benefit of developing countries.

The public sector is planned to serve as a model for the private sector in almost all countries. The BIM should provide the spear-head in various directions especially in the sphere of cost reduction techniques.

Commercial Outlook

The public enterprises are eventually expected to work on commercial lines. It is, therefore, useful to look at the growth of their sales and not profits, But it should also be remembered that profitability is not the sole objective of a public enterprise. There are other considerations too, which work very strongly in this respect. But we shall take them up later. For the time being, let us analyse the working of BIM enterprises. The following table shows the rate of growth in sales and profits during the past four years :

TABLE NO. 3

Growth of sales and profit

Year	Percentage increase in sales over the corresponding previous year	Increase in profit before tax over the corresponding previous year
1972-73	49	78
1973-74	63	170
1974-75	60	278
1975-76	8	156

Source: Annual Reviews 1972-73 to 1975-76, BIM.

A comparison of table 2 and 3 would reveal that the percentage increase in sales has been faster than the percentage increase in physical production. This highlights the fact that a state of monopoly

exists in these public enterprises and a tendency is developing in them to raise the prices of goods and services with a view to reaping profits. This is further corroborated by the figures given in the Pakistan Economic Survey for 1976-77. Net sales of BIM enterprises amounted to Rs. 4,111 Million (\$ 411 million) during 1976-77 (July March) and the net profit in the same period amounted to Rs. 60.1 million (\$ 6.01 million).

Employment Opportunities

One of the social, though not the primary, objective of a public enterprise is to provide employment opportunities. From this point of view, the progress in BIM enterprises had been fairly satisfactory. The following figures show the new job opportunities created in these enterprises :

TABLE NO. 4
(Job opportunities in BIM)

Year	New job opportunities created (number)
1972-73	2,860
1973-74	3,900
1974-75	4,857
1975-76	3,781

Source : Annual Reviews 1972-73 to 1975-76, BIM.

The Pakistan Economic Survey for 1976-77 reveals that the total number of personnel employed rose from 57,045 in February 1976 to 61,731 by the end of December 1976. This means that BIM has provided 4,086 additional jobs which may be due to capacity increase in some of the industries.

The fact, however, should not be ignored that BIM enterprises are highly capital-intensive. It is, therefore, not expected of them to make a substantial contribution to increase employment opportunities. The Draft Five Year Plan (1976-81) hopes to devote 70 percent of public investment to the basic industries of steel, fertilizers and cement, yet it adds that "the employment to investment ratio is exceptionally low."

Operational Aspects

It is universally agreed that public enterprises should function in strict compliance with the established public ethical standards. The following norms are pertinent in this respect and also helpful in evolving the performance of public enterprises :

1. The quality of products should not be lowered in order to make larger profits.
2. Stocks should not be hoarded in order to create an artificial scarcity and charge higher prices.
3. Devices to evade taxation should not be adopted.
4. Manipulation of accounts should not be resorted to.
5. The public enterprises should serve as a model for others in extending such facilities as housing, medical aid, transport, fair price shops, canteens, vocational training and education etc.

In order to ensure that these basic requirements are strictly adhered to, empirical research becomes imperative. However, in certain areas some general information is available. It has been claimed that during the last five years, the dues and taxes collected from BIM enterprises increased by 700%. The labour was given a better deal and the average monthly take home wage was about Rs 600 (\$60) per month in 1975-76 compared with Rs. 140 (\$14) in 1971-72 But some of the financial statements of BIM enterprises reveal that they have been passing through serious working capital management crises. This area needs to be explored fully. Thus far the nationalised banking sector has come to their rescue. But, in ultimate analysis, these enterprises must set high example of better house-keeping.

Development Programmes

The mix of resources in the new units which are coming up is roughly 70% debt and 30% equity. The cost of capital these days is very high and, therefore, it is desirable to change this mix. This would also help in bringing down the cost price.

Recently there has been a change in textile technology. All over the world the open-end technology is being used. But in Pakistan we are still making investment on conventional technology. The result is that our investment is becoming unproductive and we cannot compete in the international market.

The installed capacity in a number of industries, especially in textiles, sugar and vegetable ghee—all essential consumer goods—is more than adequate. Instead of making new investment in these fields, the public sector especially the BIM should make arrangements, and suggest to others as well, to balance and modernise the existing units. This method will not only help in reducing the cost price through improved efficiency of the existing units, but will also economise on scarce financial resources.

One of the cardinal principles, which ought to be implemented in respect of financing the development programmes of public enterprises is that these enterprises must generate their own funds to finance their development needs. On June 11 1977, the former Pakistan Federal Finance Minister also strongly emphasised this point. It is absolutely necessary to implement this principle and develop ways and means whereby the process of internally generating funds and earmarking a portion of the earned profits for development purposes is actually pursued. This critical area calls for serious attention as the Pakistan Federal Budget 1977-78 reveals that against a sum of Rs. 3370 million (\$ 337 million), the BIM enterprises have generated a sum of only Rs. 160 million (\$ 16 million) for their future development plans.

During 1975-76, the ten corporations were allocated a sum of Rs. 330 crore (\$ 330 million). The largest allocations were Rs. 100 crore (\$ 100 million) for the Karachi Steel Mills and Rs. 96 crore (\$ 96 million) for National Fertilizer Corporation.

The expansion programme of BIM units covered 43 projects, including expansion of capacities of the existing units and new units in various stages of completion. Excluding the Karachi Steel Mills (A Rs. 1342 crore or \$ 1342 million project), the total investment in the other 42 projects will be Rs. 964 crore (\$ 964 million), including Rs. 574 crore (\$ 574 million) as foreign exchange component. Broadly these projects include Fertilizers* (3) Petroleum and Petro-chemicals (5) Chemicals and Ceramics (7) Heavy Engineering (2), Heavy Electrical (2) Light Engineering (7) Cement (4) Automobile sector (2) and PIDO (10) in respect of their on-going projects in textile, sugar, refractories, and wood industry.

Obviously, therefore, BIM's own funds would fall short of its requirements and it will have to depend heavily on foreign assistance. The Draft Plan asserts that public sector industry would be required to generate more funds and finance an increasing part of the public sector industrial investment programme but strangely it does not discuss means to this end.

Accountability

The former Prime Minister of Pakistan, in his national broadcast of December 20, 1971, laid a great emphasis on the question of enforcing *accountability* as an effective tool for control. To ensure its implementation, it is necessary to evolve some solid mechanism. At present, no comprehensive budget in respect of BIM enterprises is presented to the National Assembly for debate and discussion. It would be in the fitness of things to prepare a regular budget and present it to the Parliament for approval. Besides, a wider dissemination of information in respect of operational results and financial position of the public enterprises is also necessary.

Structure of Management

In BIM as well as in other public sector organisations the top management is in the hands of people either drawn from various service cadres or engineers. In very few cases wholly professional personnel are running the show. With few exceptions the service people and engineers do not have the requisite knowledge of the science of financial management. The financial experts engaged by public enterprises do not enjoy adequate authority commensurate with their responsibility to check or control the finances. Their functions have been reduced to petty book-keepers and their only job seems to be to please their bosses for earning good annual reports.

In order to run the BIM enterprises on more scientific lines a central pool of financial experts will have to be created which should be managed by an independent and separate authority. In BIM, there already exists a Finance Group that could serve the purpose well. This would help in curtailing unnecessary and unproductive spendings and result in reduced financial cost.

The importance of employing Professional Managers in their true sense cannot be over-emphasised. Some time back the BIM did employ Professional Managers to meet the challenge of work. But it appears that later on this measure was dropped under some kind of

pressure and the personnel were stuffed by deputationists and non-professional generalists. In the interest of efficiency the old policy should be re-introduced and the only criteria for recruiting managerial staff should be competence, initiative, sincerity of purpose and drive. The shortage of trained managerial personnel leads to over-centralisation and excessive bureaucratic control. The BIM directorates often complain about the lack of autonomy from the Ministry, while the managers of public sector corporations and production units complain that their initiative and flexibility has been curtailed by BIM management. Conversely, the top echelons suspect that there was inexperience and incompetence at lower levels and therefore they have to make all important decisions themselves.

On a matter of principle the Government should not seek to impose external controls on the corporations more than is necessary for official supervision. The need is to revise the existing Government BIM relationship. The objective should be to give maximum autonomy to production units. The discipline of business and industry is significantly different from the discipline of a political or government administration. The basic difference between a corporation and government department should not be only in the absence of rule but in the attitude towards them. If objectives such as achievement of prescribed target, reduction of production cost, cutting down of completion time, improvement of efficiency etc., are served by departure from normal procedures, such departure should be permitted freely. If it is obvious that the existing procedures need change and the sooner they are changed, the better. The departure in any case should be for a purpose and must be the result of deliberate decision.

Generally, the Government departments are not in a position to deal with cases sent by the public enterprises because the rules of business often require horizontal consideration with several departments and for vertical clearance. Moreover, the Section Officers of the Government are usually not fully equipped to deal with urgent references which the corporations prepare with an intelligent investment of time and energy. Generally such cases keep lying for months together in red-tape on the desks of section Officers awaiting their turn for disposal. In the interest of work efficiency and speedy disposal, of cases, therefore, it is essential to relax Government control and ensure autonomy to public enterprises.

In order to improve the management, therefore, the following steps are necessary :

1. Greater autonomy should be given to the management of various corporations by delegating to them a number of prerogatives which are now concentrated in the Ministry of Production. Likewise, greater autonomy should be admitted to the management of each productive unit especially in day to day affairs.
2. The standard of management in public sector should be improved through in-service training.
3. The BIM should be changed with the responsibility of manpower planning and manpower development. To achieve this purpose an assessment of the present and future requirements of various positions for managerial, technical and supervisory personnel will have to be made.

Dividend Policy

The dividend policy which is being centrally controlled in BIM needs a second look. It appears that dividend declaration is not guided by the capacity of the concern paying the dividend, but by certain other consideration. In some cases it has been reported that the dividend rates are as high as 25% to 36%. The prices of goods made available by these industries should be so adjusted as to maintain a reasonable level of profits and dividends should be brought down to 10-15%. The rationalisation of the dividend policy would preclude the possibilities of over-concentration of resources in industries where the rate of dividend declared is unusually high.

Stock Levels & Mechanisation of Record Keeping.

The inventory levels in most of the BIM units are not being determined on scientific lines. The level is normally guided by the top management wishes, who are usually not competent enough to do so. It is absolutely necessary to determine peak levels and to re-order them according to supply resources. This could be achieved only if the inventory accounting is mechanized. The introduction of mechanized system would also remove inventory valuation problems. It would curb the freedom of management to manipulate profitability through valuation of inventories. The introduction of new system would

further enable the management to execute proper control measures against thefts and obsolescence and will reduce financial cost. This, in fact, would establish accountability.

FRENCH EXPERIENCE

BIM could well take a cue from France. In France the nationalisation of certain industries began in pre-war years and was well extended from 1948-1954. The nationalised industries are managed by the representatives of the Government as well as those of the consumers. The administrative control is vested in individual Ministers who are accountable to their parliament and are responsible for the general economic and technical policy of the undertaking. The Central Board and its Chairman are nominated by the Minister. A Commissioner is also appointed by the Minister and is charged with the responsibility of carrying out the technical and economic policies of the undertaking. The Finance Minister appoints a State Controller who exercises definitive financial control over every enterprise. Periodical reports on their working are submitted to the Minister concerned. Reports by the Financial State Controllers and the opinion of *Cour Des comptes* are placed at the Bureau of of the Chamber. Members of the Parliament move alterations and additions to the existing legislation regulating these undertakings. Accountability is ensured through questions and debates on any proposal contained in the Finance Bill.

CONCLUSION

In conclusion, one may repeat that the public sector occupies an important place in the large-scale industry. BIM, therefore should take initiative in introducing technical innovations, creating stronger links with small industries through such means as sub-contracting and servicing, improving labour-management relations and raising efficiency standards. To achieve these targets it must improve its managerial and accounting standards and secure maximum autonomy from the Government.

THE AGRICULTURAL TAXATION REFORMS—1977

*Balal Abbas**

The agricultural taxation structure of Pakistan is in need of a change from the way it is being regulated. There is a need to mould it according to the changed socio-economic and political conditions and a revolutionary change in the concept of taxation. The traditional concept of land taxation has lost much of its viability especially in less developed countries, where the fundamental problem is the maximum possible domestic resource mobilization. The solution lie in the integration of agricultural taxes with the overall tax structure of the economy. This need for change has also historical basis. In 1925 the question was examined by the Indian Taxation Enquiry Commission which wrote :

“... there was no historical or theoretical basis for continued exemption from the income tax of incomes derived from agriculture.”

Similarly, the Taxation Inquiry Committee 1960 saw the matter as “the pattern of central income tax was both practicable and equitable.” The basic reason why the agricultural income tax was neglected was the predominance of big landlords in the legislature, e.g. in 1951 80 percent of the members elected for the Punjab Assembly were landlords.

Balanced Tax Structure :

The division between agricultural income and non-agricultural income creates a serious flaw in a taxation system by making it inelastic and unrealistic. A progressive tax system has to adopt equity objective as a basic principle of its policy. The vertical equity eliminates inequalities of income and wealth, whereas horizontal equity is concerned with an identical treatment for all tax paying sectors and maintaining an inter-sectoral balance in taxation system. The tax structure in Pakistan fulfils the objective of vertical equity to som

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extent but ignores horizontal equity, allowing, an inter-sectoral disparity to be maintained. The Tax Commission appointed in 1970 wrote.

“There was no economic justification for treating agricultural and non-agricultural incomes separately. In fact a separate tax treatment to income originating from different sources militates against the very concept of income taxation.”

Another feature of our taxation structure is that it does not contribute revenue in accordance with the rise in the GNP. It can be seen that the taxation capacity of the country has already reached a saturation point. The taxes already in existence bring only 12.2 percent of the GNP to the national exchequer. The ratio of direct taxes is even more discouraging. In a sample of twenty seven developing countries taken by the International Monetary Fund, Pakistan is at the lowest rung in Tax-GNP ratio. This is so because the existing tax structure covers a relatively narrow range of population, and even a small increase in the rates of taxation adversely affects the propensity to save of this particular population group.

About 15 percent of the total tax revenue of the federal and provincial governments is raised through direct taxes which affect less than one percent of the population. The contribution of direct taxes to agriculture is negligible, i.e., about 0.5 percent. According to an estimate the incidence of direct taxes is 73 percent on urban population and 27 percent on rural population, thus making the tax burden inequitable and taxation system harsh and unjust.

An increasing reliance on indirect taxes has been a major cause of distortions, especially of price hike. The contribution of indirect taxes to total revenue has lately gone up to 85 percent. On the other hand the ratio of direct taxes has not shown any appreciable increase during the last thirty years. A reasonable balance, therefore, has to be struck between direct and indirect taxes for balanced growth.

Tax Reforms—1977

The realization of the above facts on the part of the government brought about the Land Reforms of 1977. The new system of taxation in agriculture is intended to raise the share of direct taxes in the total tax revenue and raise the Tax-GNP ratio by broadening the tax base and providing a large and yet untapped area of taxation potential for exploration.

The following are the highlight of the reforms :

1. Agricultural income tax replaces the existing land revenue. Incomes from 25 acres or less of irrigated and 50 acres or less of unirrigated land are not liable to income tax.
2. No individual can own more than 100 acres of irrigated or 200 acres of unirrigated land.
3. The assessment of agricultural income is to be made according to a simplified procedure. The tax is to be paid in installments, one on December 15 and the other on June 15 of each year.
4. Land resumed by the government is to be granted free of charge to tenants, who possessed it during Kharif of 1976 and Rabi of 1975-76.

The imposition of agricultural income tax is of crucial importance in these reforms since it was being necessitated on both economic and social grounds, in view of the changing economic structure of Pakistan.

Taking the economic aspect in can be argued that land revenue was not a tax on actual income but it was a tax on average income from an acre of a particular type of cultivated land, calculated on the basis of past thirty years and assumed to remain constant during the next thirty years. This non-progressive tax was inadequate for the purposes of resource mobilization for development. According to the Report of the Study Group on Mobilization of Agricultural Incomes.

"... agricultural incomes in West Pakistan increased at current prices from Rs. 7711 million in 1959-60 to Rs. 15478 million in 1969-70, agricultural taxes during the same period registered a small increase from Rs. 172 million to Rs 183 million (the ratio of agricultural taxes to agricultural incomes falling from 2.2 percent to 1.2 percent)."

During the last few years successive increases in the prices of wheat, rice, cotton and other agricultural product on the one hand and the subsidies advanced by the government for inputs on the other were bestowing upon the farmer large inflows of income. A progressive income tax is therefore justified on these increasing incomes. Moreover during the past few years the consideration of redistribution of income has gained a lot of importance. The strategy of "Redistribution with Growth" has become the new fad in development economics. The role of progressive income taxes as an instrument of achieving growth as well as equal distribution of income is self evident.

From the social point of view it was also desirable to tax the big landlords, busy with conspicuous expenditure and enjoying immense economic power. The income tax is more fundamental for its psychological aspects than for its net yield in rupees. Politically also it will have the effect of breaking the back of those landlords who are used to assume the political leadership of their area irrespective of their inherent qualifications.

Effects on Resource Mobilization :

In a developing economy like Pakistan the task of resource mobilization for development has many aspects. It does not merely mean the generation of new resources by increased production. The more important aspect is the adoption of an appropriate socio-economic strategy for their best possible use, and their distribution among various sectors and classes of society. According to Hirschman the real scarcity in less developed countries is not of resources but the means and ability to bring them into play. He writes that,

“ . . . the development is held back primarily by the difficulties of channelling existing resources into available productive investment opportunities.”

This task can be achieved by adopting progressive income distribution policies which direct the tempo of socio-economic advance on the right lines. It also implies the prevention of wasteful resource allocation, conspicuous consumption, non-functional and luxury investment and the diversion of the flow of these resources into productive investment. In case of Pakistan, there is growing evidence that mechanization and commercialization of agriculture has generated large sums of money, which are not being productively utilized. Since many of the inducements and incentives are being provided by the government, for making agriculture a commercial enterprise, introduction of income tax is a logical step.

The new fiscal approach will enable the government to collect more revenue from big and prosperous farmers than the old inflexible land revenue system. Indirectly, the more scientific and progressive income tax may also help to divert a large portion of agricultural incomes, now going into wasteful consumption, to more productive channels by linking tax liability to investment allowances. Over a period of time, this can be expected to generate reasonable private savings, which can be transferred to the public sector. In the first year of its operation the revenues should be much more than a mere

Rs. 20 crores that the land revenue has been able to generate, It is estimated that four lakh new assesses will pay a sum of around Rs. 50 crores as income-Tax. This estimate is based on the number of farms falling in the category of 25 to 150 acres. However, the real significance of this revolutionary step is not confined to a single year. Basically it is a long range measure which will enable the planners to have a more clear picture of domestic resources.

Viewing the issue from author angle, we see that the agricultural sector constitutes, the major consumer goods sector in Pakistan. It is a surplus in this sector that will set the pace of growth of investment in the industrial sector of the economy. The expanding productivity of the agricultural sector is a pre-requisite for the creation of a surplus in this sector. But even when agricultural productivity is increasing it may not result in any reasonable surplus for investment in the industrial sector. Certain measures are necessary to stop the agriculturists from keeping the increased output for their own consumption. The agricultural income tax will, hopefully, work as a strong device to tap this surplus for investment in other sectors of the economy. It can even be used by the government in the agricultural sector for building physical and social infrastructure.

The role of agricultural income tax can also be important in mobilizing saving potential concealed in the form of disguised unemployment in rural areas of Pakistan. The marginal productivity of some labourers in agriculture is zero and if they are withdrawn from this sector the total output will remain unaffected. If surplus labour can be withdrawn from agriculture and put to work somewhere else, their employment can be financed by the mobilization of savings released by their withdrawal from agriculture. As Nurkse pointed out the process of employment of surplus labour in development projects becomes self-financing if output released in the agricultural sector is fully mobilized. A stiff income tax on the agricultural sector will prove useful for this purpose, as is evident from Japan's experience in this field.

An argument which is frequently raised against agricultural income taxation relates to the problem of its administration in view of large size and varied character of population. But if we study the matter in detail, it is note-worthy that the farmers owning below 25 acres of irrigated and 50 acres of unirrigated land constitute about 70 percent of total holdings. Therefore, there is no danger that the

tax reforms would involve the small farmers, tenant cultivators, share, croppers and landless labourers. A major proportion of rural population will remain outside the range of income taxation. This will reduce the administrative complexity of the new system especially when emphasis is being laid on self-assessment by the tax payers. Further, this will attract greater investment for modernization of agriculture, since these measures provide concessions for stimulating investment in agriculture. The government has allowed deductions against capital investment in tractors, tube-wells and other agricultural machinery.

CONCLUSION

It can be contended that these reforms will lead to the transformation of the rural structure by an equitable distribution of wealth. The disparity between the privileged and the unprivileged will narrow down. It will evolve a dynamic and progressive approach to agricultural taxation. The tendency to exempt the largest segment of the economy would be stopped. It will remove inter-sectoral imbalance and raise the Tax-GNP ratio by increasing the percentage of direct taxes. But all this, in the ultimate analysis, depends on the efficiency and sincerity of purpose in implementing these reforms.

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THE IMPACT OF SOIL EROSION ON WHEAT PRODUCTIVITY IN PUNJAB

By Azhar Mohiyddin*

Soil erosion losses are for practical purposes irretrievable. There are some soil type areas where the sub-soil can be brought into a good fertility state relatively quickly and with little effort, but they are rare. Usually once the precious topsoil is gone the land must be abandoned. Because of the irreversable nature of erosion losses, society's first and foremost effort should be to reduce soil erosion to a minimum to keep the top-soil in place.

Fertility depletion in contrast to erosion is a reversable process where the land is not susceptible to water or wind erosion. A soil depleted in fertility can usually be restored through manure, green manure, commercial fertilizer and good tillage practices.

The most serious problem being faced by Pakistan is that of water logging and salinity. Irrigated areas constitute over 80 percent of the total cultivated land and the culturable commanded canal irrigated area is about 33 million acres. Prior to large scale irrigation the water table was 80 to 90 feet below the ground surface. It has now risen to within 10 feet of the ground surface, a potentially hazardous limit-in 17 million acres. In some areas it is within 0.4 feet below the ground surface. In addition, about 11 million acres is affected by salinity. This has resulted in low agricultural yeilds of the order of almost one third of world average. According to a report on waterlegging and salinity published by W.A.P.D.A. in July 1973, if we were to attribute only 20% of the reuced yeilds to these twin factors, the loss in agricultural production was estimated to Rs. 2.5 billion (U.S.S 250 million) per annum. The report said that some 15 years ago it was estimated that approximately 100,000 acres per annum of agricultural land were going out of cultivation on account of salinization.

*The author is an old Ravian. The article is based on an extract from his thesis submitted to the P.U. in 1975-76, in partial fulfilment of the requirements for Master degree in Economic.

This showed the need for a massive integrated effort to be made in a systematic fashion to take measures to reclaim land thrown out of cultivation as well as to prevent good land from going bad.

Previous Approaches

Although waterlogging and salinity were always recognized as evils, the efforts to combat this twin menace were sporadic and not inspired by an overall effective strategy. It was in 1954 that with U.S. Government assistance a major attempt to arrive at a correct appraisal of the problem was made. The programme extended over 12 years and covered 31 million acres. It resulted in a better understanding of the relationship between the various factors affecting waterlogging and salinity. Thus a clear concept of drainage reclamation and collateral agricultural development emerged.

New Approach

In 1959, the first major effort for waterlogging and salinity control was made on a large scale. A salinity control and Reclamation Project (SCARP) was taken up for 1.2 million acres. In 1961, an overall programme with a long term perspective was conceived so as to assess the magnitude of the effort and resources required. Soon after, the problems of waterlogging and salinity became the subject of a comprehensive multi-disciplinary study, when at the request of the Government of Pakistan the late U.S. President Mr. John F. Kennedy approved the appointment of a White House Panel of internationally renowned experts in agriculture, hydrology, engineering, economics and the social sciences which was assembled by

Dr. Jerome B. Wiesner (Special Assistant to the President for science and Technology). The Chairman of the Panel was Dr. Roger Revelle, Scientist Adviser to the Secretary of the Interior. The task entrusted to this Panel was to arrive at solutions to tackling the problems of waterlogging and salinity in West Pakistan based on the latest technology. The first draft report of this Panel was submitted in September, 1962. While forwarding the report to the President of Pakistan, Mr. John F. Kennedy stated :—

“The solutions of the problem of the low agricultural productivity and waterlogging and salinity in West Pakistan requires efforts of unprecedented proportions. The most far-reaching conclusion of the Panel has been that waterlogging and salinity must be attacked within the context of a broad approach towards a large

and rapid increase in agricultural production, combined with sustained human effort and sufficient capital investment to attain momentum in improvement, The Panel's primary recommendations to achieve these goals is a reorientation of strategy to concentrate effort on limited project areas, each roughly a million acres in size so as to permit a coordinated attack on all aspects of the agricultural problem. In total, this becomes an ambitious programme, but one that is required to meet an exceedingly difficult set of problems".

The final report was forwarded by the former U.S. President Mr. Lyndon B. Johnson to the President of Pakistan in March, 64. This report has been a valuable asset in tackling the twin problems and has gone along in providing a firm technological and economic basis towards evolving a long term strategy based on sound scientific lines.

After looking at the problem from the national point of view, now we can study it in context with the Punjab. In 1959 WAPDA took up its first salinity Control and Reclamation Project (commonly known as SCARP) which was formulated on the basis of investigation carried out in the past. The primary emphasis under the project was to eliminate waterlogging and to reclaim the saline soils. The project provided for pumping of ground water from a tubewell to fields in the project area; and its utilization for irrigation after mixing with canal water as the ground water on the basis of its quality, was found to be useable. The water pumped by tubewell constituted a great asset for intensification of agriculture and for reclamation. The quantity to be withdrawn in the project was based on the concept of 'operation' defined as the quantity of water which can be artificially withdrawn from a ground water reservoir without lowering ground water level below an economic lift.

Keeping in view the above mentioned criteria seven SCARPS in the Punjab covering 10.1 million acres were planned. Out of the seven projects planned for the Punjab so far, four projects, namely SCARP-I, SCARP-II, SCARP-III and SCARP-IV have been approved for implementation to cover an area of 4.85 million acres and installation of 6844 fresh ground water tubewells, 808 saline tube-wells and construction and remodelling of 490 miles of surface drains. The total outlay on these projects is estimated to be Rs. 1583 million. All the 6844 fresh ground water tube-wells have been installed and

put into operation. In addition 340 miles of surface drains have been constructed. The work on the installation of saline zone tubewells have been initiated. The total expenditure on the projects upto June 30, 1975 is about Rs. 1296.23 million.

This programme met a setback in the last few years due to financial constraint. The present Government, realizing the severity of the problem and importance of agricultural development to meet the needs of growing population, directed the agencies concerned to formulate an accelerated programme. The Government promised to earmark adequate funds to support this programme. The Government also created a public corporation called National Tube-well Construction Corporation to augment the existing capability in the country to execute this gigantic programme.

To make a start on the implementation of Accelerated Programme for the control of waterlogging and salinity in the Punjab, three Pilot Projects, SCARP Shahpur, Shorket, Kamalia and Panjad Abbasia, covering an area of 0.48 million acres have also been approved for implementation. These projects provide for installation of 988 tubewells. The total estimated outlay on these projects will be of the order of Rs. 355.06 million. Work has been initiated on all the three projects.

The project performance can be considered from two angles. Firstly from point of physical performance of project tubewells and secondly from the point of view of achievement of the ultimate objectives in terms of eliminating waterlogging and salinity, provision of additional irrigation supplies for increased agricultural production.

The physical performance of SCARPs, particularly of SDARP-I has been quite satisfactory inspite of some operational and maintenance funds constraints and technical limitations.

The performance of SCARPs from the second point of view is also encouraging. In all the SCARP projects where tubewells have been in operation, the waterlogging problem has been brought fully under control. Some head-way has also been made to reclaim the salt affected lands. This, however, requires more concerted efforts and organisational support. As a result of additional irrigation water made available from the project tubewells, the cropping intensity in the areas is increasing gradually and more areas are being

brought under cultivation. Detailed information on the performance of projects which have been completed and are in operation for sometime is described below :—

Ground Water Pumpage

In Punjab some 6844 irrigation-cum-drainage water tubewells have been progressively brought into operation between 1961 and 1973 as a part of SCARP-I, II, III and IV. The total pumpage during 1962-63 when SCARP-I was put into operation was 2.77 million acre feet. The pumpage gradually increased with the generation of new tubewells and was 2.84 million acre feet in 1964-65, 3.80 MAF in 1969-70 and 7.24 in 1974-75.

SCARP-I comprises 2069 tubewells and went into full operation during 1962-63. The average annual pumpage during the four initial years amounted to 2.45 MAF which dropped to an average of 1.75 MAF during 1974-75 as against the designed pumpage of 1.64 million acre feet. The over pumpage during the initial years of operation represented largely wastage of water due to mismanagement by the farmers. The reduction in pumpage in subsequent years apart from indicative of the experience of the farmers to utilize ground water more efficiently, is also due to reduction in discharge of the individual tubewells as a result of incrustation of tubewell screens, lowering of watertable and wear and tear of pumping equipment. Nevertheless inspite of the reduction in discharge capacity of the tubewells, the actual pumpage has all along been more than the projected pumpage, except during 1974-75 which could be attributed to low demand because of wide spread rains. Thus the performance of the project with respect to groundwater supplies for irrigation has so far exceeded the project targets.

Out of 2205 tubewells in SCARP-II 1552 tubewells were gradually placed in operation between 1963-to June, 1972 and the remaining 653 during 1972-73. Consistent with the increase in the number of operational tubewells, the actual pumpage in the project has gradually increased to 2.59 MAF during 1974-75 as against the designed pumpage of 2.90 MAF.

In SCARP-III 818 tubewells were placed in operation between 1968 to June 1972 and the remaining 817 tubewells during 1972-73. Consistent with the above schedule of tubewells operation the pumpage in the project area has gradually increased to 2.24 MAF during 1974-75 an against the designed pumpage of 2.01 MAF

Out of 935 tubewells in SCARP-IV, 562 tubewells are placed in operation between 1958 to June 1972 and the remaining 373 tubewells during 1972-73. The actual pumpage in the area was accordingly increased to 0.99 MAF during 1974-75 as against the ultimate designed pumpage of 1.26 MAF.

Waterlogging and Salinity Control

As a result of pumpage by the SCARP tubewells the watertable in the project areas has been brought fully under control. In SCARP-I area, which has been in operation for over 12 years, the average drop in watertable is estimated to be 19 feet thus largely eliminating the water logged conditions. Similarly, out of 0.316 million acres affected by soil salinity in SCARP I about 0.312 million acres have been reclaimed upto June 1974. However, in areas which cannot be reclaimed through simple teaching technique because of sodic soils, more concerted efforts are needed to reclaim the land with the use of chemical amendments and proper cultural practices.

In SCARP II the drop in watertable between 1968-70 is estimated be 2 to 8 feet. In SCARP III and IV, the average decline in watertable is estimated to be 3 feet and 5 feet respectively over the short period of their operation.

The extent of areas having watertable within 10 feet of ground surface (preproject) was 58% in SCARP I, 64.0% in SCARP II and 38.4% in SCARP-III. With the operation of tubewells the areas having depth to watertable within 10 ft of ground surface reduced to 17.2% in SCARP I, 20.6% in SCARP II and 36% in SCARP III upto June 1974.

In SCARP I area the gross value of agricultural produce has increased from Rs 93 million under pre-project conditions to over Rs 440 million at the constant price index thus representing five fold increase. It is estimated on the growth pattern of SCARP I that the annual increase in agricultural production in the completed portions of other SCARPs at present is of the order of Rs. 500 million.

In an article on "Problems of Policy in Planning the Indus Basin Investment in West Pakistan" Arthur Gaitskell said that, "There is the difficulty—of knowing whether the increase in gross production was the result of extra yield per acre or was mainly due merely to extra area cultivated. It is very difficult to assess this point. Claims

have been made in SCARP I that there has been a substantial increase in yeild per acre, but a recent survey made on a representative number of water channels does not corroborete this claim. Undoubtedly some of the increase was due to new zones brought into irrigation for the first time but apart from this it may well be that the farmers first reaction to getting additional water was to extend the amount of land (i.e. the intensity) devoted to crops within his farm".

The table given on the following page shows particulars of salinity control and reclamation projects taken up so far.

**PARTICULARS OF SALINITY CONTROL & RECLAMATION PROJECTS
TAKEN UP SO FAR**

Sl. No.	Name of Project	Culturable commanded area million acres	No.	Fresh groundwater tube-wells Installed capacity (cusecs)	No.	Saline ground water tubewells Installed capacity (cusocs)	Length of surface drains (Miles)	Capital cost including electrification Million Rupees (On the present rate of exchange)
1.	SCARP—I (Central Rechna Doab)	1.14	2,058	5812	—	—	—	239.16
2.	SCARP—II (Chaj Doab)	2.10	2,208	8468	460	2760	450	839.96
3.	SCARP—III (Lower Thal Doab)	1.05	1,604	6129	131	631	150	407.15
4.	SCARP—IV (Upper Rechna Doab)	0.56	935	3714	—	—	—	189.32

The table given on this page shows the benefits from the main projects included in the proposed programme for control of water logging and salinity including on-going and new projects in the Punjab.

**BENEFITS FROM THE MAIN PROJECTS INCLUDED
IN THE PROPOSED PROGRAMME**

Name of Projects	Intensity of cultivation%		Water availability MAF Per Annum		Benefits Cost ratio — 8% rate of interest
	Pre-project	With-project	Pre-project	With-project	

ON GOING PROJECTS

SCARP—I	74	109	1.25	3.25	3.4 : 1
SCARP—II	100	126	2.67	4.54	4.6 : 1
SCARP—III	77	120	1.83	3.70	3.4 : 1
SCARP—IV	92	150	0.55	1.89	5 : 1

NEW PROJECTS

SHORKOT KAMALIA	114	137	0.66	1.46	7.9 : 1
PANJNAD ABBASIA	87	150	4.1	6.30	7.2 ; 1

The area under water logging and salinity in the Punjab for a few years is given on the following page. This shall give us an idea and a better understanding regarding the problem in a greater detail. We shall be able to note the general trend from these figures. It will also enable us to calculate the productivity foregone. This can be done by multiplying the total area that has gone out of cultivation by the per acre yield in the respective Province, division or district. Finally we could also find out the loss in monetary terms by multiplying productivity foregone by the price per maund in the respective year.

**PRODUCTIVITY FOREGONE DUE TO WATERLOGGING
AND SALINITY CALCULATED FOR 1970-71**

	Total Area gone out of cultivation	Yield Mds/acre	Productivity foregone
The Punjab	3074728	12.22	37573176.16
Rawalpindi Division	40422	5.04	204626.88
Lahore Division	637393	11.70	7456698.10
Multan Division	1110210	16.11	17885483.10
Bahawalpur Division	448032	13.15	5891620.80
Sargodha Division	838671	12.48	10466614.08
Sargodha	20460	12.30	2502558.00
Lyallpur	346182	15.88	54973770.16
Jhang	287004	12.61	3619120.44
Mianwall	0025	6.87	13911.75

Taking the productivity foregone from the above table for the Punjab which is 37573176.16 and multiplying it by 17 which was the price of wheat per maund in Rupees for the year 1970-71 we can calculate the loss to our country in monetary terms for the year in question. This loss would come equal to Rs. 638743994.72. It is worth noticing here that these calculations and their results if made for the present year that is 1966 the would show an even greater loss. Both the yield per acre and the price per maund of wheat have increased considerably. Therefore importance of reclaiming the land gone out of cultivation is also increasing with the passage of time and increase in population. For making this analysis we have taken the assumption that if all the land that has gone out of cultivation was available for cultivation, it would have been used for cultivating wheat.

Finally we can quote Prime Minister Zulfikar Ali Bhutto, speaking on the subject who said :

“We have to give greater attention to the curse of waterlogging and salinity. So far we have merely toyed with the problem. Its seriousness must be seriously faced. We must do something worthwhile on a large scale, far above the SCARP scale”.

This shows a sign of hope, the extent of realization and the degree of importance regarding the problem of waterlogging and salinity which we have discussed at length in this chapter.

Area in Acres

AREA UNDER WATERLOGGING AND SALINITY IN THE PUNJAB FOR THE YEARS 1966-67 TO 1970-71

Division and District	1966-67			1967-68			1968-69			1969-70			1970-71		
	Water legged	Saline	Total	Water legged	Saline	Total	Water legged	Saline	Total	Water legged	Saline	Total	Water legged	Saline	Total
Punjab	65307	3214678	3279985	65027	3109410	3174437	67186	3129971	3129971	54386	3042863	3297249	51039	3023689	3074728
Rawalpindi Division	3056	54327	57383	4163	56687	60850	7245	46619	53855	5109	43755	48864	3962	36640	40422
Lahore Division	3798	716654	720452	2728	683728	686456	740	665366	666106	626	659572	560198	1785	635608	637393
Multan Division	13107	1173066	1187173	15191	1161263	1176454	12101	1179533	1191634	12084	1117631	1129715	10555	1099655	1110210
Sargodha Division	25357	855029	880386	22848	783631	806479	24355	812378	836733	18830	797823	816653	17000	821671	838671
Sargodha	17872	253518	271390	16354	241305	257669	12445	186040	198485	9170	185924	195094	7668	195792	203460
Faisalabad	2583	344762	347345	2559	305264	233015	3568	330691	334259	3859	334132	327991	3739	34243	336182
Jhang	4302	249753	249755	3335	229680	229680	3783	2882265	292048	4264	285414	289678	4056	282948	287004
Mianwali	600	6996	7596	600	7382	444198	4559	7382	11941	1537	2353	3890	1537	488	2025
Bahawalpur Division	19989	415602	435591	20097	20097	424101	22745	426084	448829	17738	424082	441819	17737	430295	448032

44 (a)

Now it would be most appropriate to finally have a look at the package of inputs which really brought about a revolution in our agriculture sector. For decades the agriculture in West Pakistan had remained stagnant. Then suddenly within a period of two or three years spectacular increases in the agricultural production occurred. The wheat production went up from its traditional of 4 million tons in 1966-67 to more than 6 million tons in 1967-68, adding about 1,000 million rupees to G.N.P. Similar results were found in case of other crops such as rice, maize etc. Different people would describe this phenomenon in different words but the fact that this breakthrough occurred in a very short period, shows that it could have only been adequately described by a word such as 'revolution'.

The green revolution has not been particularly based on better seeds alone. In case of wheat, no doubt Mexican seeds have been the major engine of growth in West Pakistan agriculture but an equally important aspect which must not be lost sight of, is that the foundations of green revolution had in fact been gradually laid in the years prior to the commercial introduction of Mexican wheat and IRRI rice in 1967-68. To quote an example, in late 1963, there was an excess stock in West Pakistan of about 250,000 tons of fertilizers but by November 1964 not only had all the excess stocks been disposed off but the WPIDO factories had unfilled orders of 185,000 tons coupled with this, outburst in fertilizer usage was the tremendous initiative shown by the West Pakistani farmers in putting up tubewells. A rapid growth in private tubewells which had been going on for a number of years even prior to 1964 gained a further momentum in the years after 1964. In fact mid 1964 was the real turning point in the history of agricultural development in West Pakistan.

The three major components of green revolution in West Pakistan and specially in the Punjab have been an investment in private tubewells high-yield seeds and increased use of fertilizers. Therefore although this green revolution is more broad based than a mere chance acceptance of 'miracle seeds' yet it is not broad based enough to have become institutionalised in our agricultural system. Also it must be admitted that lasting progress is not achieved through occasional breakthroughs. It can be sustained only through institutions which on the one hand are permanent enough, so that the policy makers and the farmers are able to set their sight on the long range and on the other hand flexible enough to accommodate the fluctuating needs of agricultural progress.

DEVELOPMENT BUDGETS OF PAKISTAN (1970-75)

By Nadeem Asghar*

Introduction

The period 1970-75 is of great significance in both the political as well as economic history of Pakistan. We faced serious crises during 70-71 when both natural phenomena and political disturbances hurt the development process very badly. Agricultural production in East Pakistan was adversely affected by a severe cyclone, while, during the same year, Western Wing suffered from a shortage of water due to late rains and low discharge in the canals. Industrial production, was low due to labour unrest, strikes and the closure of mills in East Pakistan. Then the year 1971-72 bears the imprint of the well-remembered tragic political developments in East Pakistan. In this regard, the steps taken to preserve the integrity of Pakistan, both the actual war and the preceding action, and eventually the fall of East Pakistan have also taken their toll in economic field. Political stability was created after the assumption of office by Pakistan Peoples Party. But then the process of development seemed to be hindered by the floods, the difficulties created by the world-wide scarcity of capital goods and international price hike during 73-74. However, 74-75 has seen some signs of relief and prospects for growth in future seem to be brighter than in the past.

The following table shows that inspite of so many adverse factors, the growth in Gross Domestic Product, at constant factor cost (1959-60) didn't decline. Though the average annual percent rate of increase is only 3.2%, but it is less than population growth rate which comes out to be 3.4% per annum. Thus per-capita income increased by 0.3% during 70-75. GDP increased by 16% and population grew by 12% allowing per capita income to increase by 4% during these five years.

*The author is an old student of Govt. College, Lahore. Extract from his Thesis, "A study of Federal Development Budget (1970-75) submitted to the University of Punjab in partial fulfilment of Examination for M.A. Degree.

TABLE No. 1

(Mn. Rs.)

GROWTH OF GROSS DOMESTIC PRODUCT DURING 1970-75

(Constant factor Cost 1959-60=100)

Sectors	1970-71	%	1971-72	%	1972-73	%	1973-74	%	1974-75	%
Agricultural	12,188		12,611		12,821		13,357		13,085	
Min. 2-Quarrying	156		159		161		110		202	
Manf. Industry	5,268		4,988		5,474		5,871		5,834	
L. S.	4,090		3,813		4,265		4,585		4,509	
S. S.	1,178		1,175		1,209		1,286		1,325	
Construction	1,390		1,163		1,346		1,490		1,892	
Other Service	8,098		8,718		9,721		10,173		11,195	
GDP	32,368		32,627		34,997		36,942		38,042	

Source: Pakistan Eco. Survey 75-75.

Note: Figure for 1974-75 are revised estimate while others are actual.

Agriculture

The annual growth rate for agricultural sector achieved in the past are presented in the following table.

TABLE 2

<i>Period</i>	<i>% G.R.</i>
1950-59	1.5
1960-65	3.4
1965-70	4.1

Source : Working Papers for the development perspective (1975-80) Govt. of Pak. Planning Commission Vol. II.

But during 1970-75, agriculture suffered a decline in its annual percentage rate of growth as compared to previous period.

TABLE 3

<i>Period</i>	<i>%G.R.</i>
1971-72/1970-71	3.5
1972-73/1971:72	1.7
1973-74/1972-73	1.5
1974-7 /1973-74	2.0
(1970 — 75)	1.0

Taking a detailed analysis, it becomes very clear that production targets for more than one or two crops were not achieved even for a single year during 1970-75. Various factors contributed to such a poor show. These include disturbed political conditions in 1970-71, war with India in Dec. 1971, shortage of timely rainfall, floods cyclones low canal discharges, high prices of fertilizers etc. It is important to note that production of food grains increased by 11.4% i.e. at an average growth rate of 2.3 per annum, while the increase in population is about 12% as already explained. Therefore to attain self-sufficiency in food supplies, the production of food grain should grow at a higher rate than population so that per capita availability of food domestically is increased to replace the important component in the per capita availability of food grains. The performance of agriculture sector is shown in Table No. 4 presented below.

TABLE No 4.

A DETAILED VIEW OF AGRICULTURE 1970-75 IN PHYSICAL TERMS

Crop.	1970-71				1971-72			1972-73			1973-74			1974-75		
	Unit	Target	Achievement	%	Target	Achievement	%	Target	Achievement	%	Target	Achievement	%	Target	Achievement	%
Wheat	mn-tons	7.600	6.511	86	7.338	6.450	82	7.200	7.400	103	8.500	8.500	100	8.500	7.460	88
Rice	..	15.000	12.938	86	12.700	2.169	17	2.400	2.288	95	2.600	2.402	92	2.800	2.277	81
Sugar cane	..	31.500	33.374	106	34.200	19.700	58	22.000	19.632	89	23.000	22.708	99	23.500	22.000	94
Jute	mn-bales	7.400	6.877	93	5.000	...	...	...	...	...	...	...	...	...	...	...
Cotton	..	3.300	2.297	90	3.263	4.150	127	4.150	3.947	95	3.700	3.704	100	4.500	3.567	79
Tea	mn-lbs.	73 000	69.000	94	40 000	...	...	...	...	...	...	...	...	...	...	...
Total Food Grains	mn-tons	N.A.	10.014	N.A.	N.A.	10.064	N.A.	11.100	11.086	100	12.360	12.60	98	129.60	11.157	86
Consumption of Fertilizer	nut-tons	596	425	71	578	282	66	450	436	97	675	404	60	600	425	71

Source : Annual Plans 1970-75

Wheat Crop the most important of all food grains, has been produced below target throughout the period except 1972-73 and 73-74, when the procurement price for wheat was raised from Rs. 17.00 to 22.50 per moud for 72-73 Crop and again to Rs. 25.50 for 73-74 Crop. Moreover, soil-moisture subsequent to floods enabled the nation to have more wheat production during 72-74. The production of rice has also been below target. It has been greatly reduced since 71-72 consequent to the debacle of East Pakistan. However, demand for rice has also been reduced so it does not present any serious problem. 20-25% of total production of sugar-cane was produced in East Pakistan.¹ But in 1971-72, its production was reduced by 41% i.e. from 33,374 mn tons to 19.7 mn tons. It remained almost stagnant during 72-73 but increased by 15% next year. But, as other crops, the target for its production have never been attained during 70-75 except for the first year. The production of Jute has gone to a zero figure as it was produced in the other wing of the country, now called as "BANGLADESH". The production of cotton which was below target by 10% during 71-72, exceed the target by 30%; But the production declined by 5% to 3.947 mn bales during 72-73. It recorded a further decline of 5% in 73-74 and 5% in 74-75. Thus during 71-72 to 74-75 it declined by 15% i.e. from 4.15 mn bales to 3.567 mn bales.

A rough estimate can be made about the net impact of development expenditure in agriculture. Value added by agricultural sector to GNP may be divided by the federal investment as a ratio of total investment in the sector. This will give us the contribution of federal development expenditure to GNP. It may be pointed out here that Government's contribution cannot be truly judged in these terms only. Because federal investment goes in those fields where private sector hesitates. However, the contribution of public sector in these terms is not so easy to estimate, therefore, we suffice on presenting the following table.

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1. 25 Years of Pakistan in Statistics, CSO, Government of Pakistan.

TABLE No. 5

IMPACT OF DEVELOPMENT EXPENDITURE ON VALUE ADDED TO GNP BY AGRICULTURE

YEAR	Private Investment	Public Investment	Total	Value added to GNP	Federal Investment	Contribution of Federal Investment	
	Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.	%
1970—71	463.4	748.2	1211.6	16236.00	47.23	632.9	3.89
71—72	535.2	231.00	766.2	17934.00	27.38	640.8	3.57
72—73	612.1	480.00	1092.1	21907.00	82.93	1663.5	7.59
73—74	937.6	639.20	1576.8	28084.00	109.43	1949.00	6.94
74—75	1150.0	997.9	2147.9	33645.00	575.92	9021.3	26.81

Source : For public Sector : Annual plans from 70-75 to 75-76.

For private Sector: Annual plans 75-76.

Finally, we may say that inspite of various socio-economic reform made by the present government, the value added by agricultural sector has not shown any appreciable increase during the period 70-75. Had the policies and reform been more wisely designed, implemented wholeheartedly, and responded to quickly, the rate of growth would have been much higher.

INDUSTRY

The average annual growth rate for large scale industry was 16.8% in the 2nd Plan but declined to 9.9% during the 3rd Plan period. The annual growth rates for the period 1970-75 are given below.

TABLE 6

YEAR	Large Scale	Small Scale	Total
1971-72	-6.77	-0.25	-5.31
72-73	2.14	1.32	1.96
73-74	4.03	3.05	3.82
74-75	2.58	3.12	2.69

Source : Pakistan Economic Survey 75-76.

Note : (i) Figures for 74-75 are revised estimates while all other are actual.

(ii) Growth rates for such year are calculated over 1970-71.

The performance of the economy in industrial sector has also not been very encouraging. The rate of increase in industrial output during 70-71 is estimated at less than as compared to 8.8% during 69-70. Industrial production suffered particularly during the last quarter when the production in East Pakistan was less than 25% of what was in the corresponding period during 69-70. It would not be out of place to mention here that even a single item was not produced upto the target level during 70-71. For example, food manufactures were, on average, 38% short of target. The production in Textile Industry was 45% below target. Then in 1971-72, a series of far-reaching reforms were introduced by PPP's government immediately

TABLE No. 7
A DETAILED VIEW OF INDUSTRY DURING 1970-75 IN PHYSICAL TERMS

COMMODITIES	UNIT	INDUSTRIAL PRODUCTION															Change in Industrial Capacity	
		1970-71			1971-71			1972-73			1973-74			1974-75			1969-70	1974-75
		Target	Achievement	%	Target	Achievement	%	Target	Achievement	%	Target	Achievement	%	Target	Achievement	%		
Food Manufactures																		
White Sugar	000 tons	1000	609	61	623	370	59	450	452	96	550	598	109	630	490	75	600	690
Vegetable Ghee	000 tons	300	130	43	140	159	115	209	185	88	223	230	102	275	265	95	163	330
Tea	Mn pounds	90	72	80	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Textile Manufactures																		
Cotton Yarn	Mn pounds	1100	744	68	650	740	114	770	829	108	881	836	95	950	774	81	2387	3400
Jute Goods	000 tons	1030	444	43	15	30	200	15	34	227	N.A.	36	...	N.A.	45	...	(Spindles)	
Paper & Board																		
Writing & Printing	000 tons	200	34	17	15	25	167	30	24	80	N.A.	26	...	39	39	100	47	54
Boards (All kinds)	000 tons	150	40	27	35	34	97	50	37	74	40	44	110	37	44	19	44	54
Newsprint & others	000 tons	75	30	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fertilizer (in terms of nutrient tons)	000 tons	1425	187	13	190	201	106	300	483	94	N.A.	304	...	N.A.	307	...	150	310
Cement	000 tons	7300	2653	36	3242	2564	79	3000	2830	94	2800	3055	110	3100	3100	107	3100	3400
Basic Metals																		
Steel	000 tons	750	36	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Steel (Furnace)	000 tons	N.A.	N.A.	...	136	136	100	100	...	...	N.A.	214	...	N.A.	202	...	250	800
Machinery																		
Machinery except electrical	Mn Rs.	874	354	41	282	382	100	410	...	...	...	...	...	...	...	...	...	...
Elect. machinery	Mn Rs.	678	422	62	400	300	100	555	...	...	...	...	...	...	...	...	...	...
Transport eqpt.	Mn Rs.	701	400	57	320	378	118	378	...	...	...	...	...	...	...	...	...	...

Source : Annual plans 70-76

Note : The data for 1970-71 relates to whole Pakistan in order to show the effect of separation of East Pakistan on industrial production. But for industrial process during 70-75, the year 1971-72 would provide a meaningful comparison.

after assumption of office in Dec. 71. These include, the major step of taking over of strategically important industries including iron and steel, basic metals, heavy engineering, heavy electrical, heavy chemical, gas, oil, cement, assembling and manufacturing of cars and tractors. Thus through an Economic Reform order, 31 major industrial concerns were 'nationalised'. A Board of Industrial Management was also constituted to look after these units. But value added declined by 5.6% over the preceding year. The factors held responsible for such a result include : the non-availability of imported raw materials which aggravated the phenomenon of under-utilization of capacity in import-based industries ; the shrinkage of the domestic market due to fall of East Pakistan and above all the growing labour trouble in the end of the year. However, the economy covered up its loss in the industrial sector and an increase of 6.5% in the value added brought manufacturing industries back to 69-70 levels. But 1973-74 had to see devastating floods which necessitated a revision of targets in the industrial sector. Transport bottlenecks, electricity shortage and dull international markets made a higher growth-rate impossible. The recession in international market continued during 74-75 and this coupled with lower production of sugar-cane caused the growth-rate in manufacturing industry to be much below its target.

The following provides a detailed picture of the manufacturing industry during 70-75 in terms of physical output.

In case of Food Manufacture, it is important to note that we have never been able to reach our target during 70-75. The actual production of white sugar was 29% below capacity. Vegetable Ghee was produced according to target but 17% below its actual capacity. The production of cotton yarn, in case of Textile Manufactures, has increased marginally during 71-75. The target for writing and printing paper was achieved but still there was 28% capacity unutilised. It is a matter of great relief that the production of fertilizers has increased appreciably during 71-75, i.e. by 54%, and still more encouraging fact is that this success is achieved through utilising idle capacity. In case of cement, it seems that it hasn't kept pace with the development needs which are growing faster and faster.

On the whole, we may say that heavy engineering industry and cement and steel require further attention.

The same methodology, as explained on preceding pages can be used here too in order to have a very rough estimate of federal contribution in the industrial progress during 70-75. This is done in table No. 8.

TABLE No. 8

IMPACT OF DEVELOPMENT EXPENDITURE ON VALUE ADDED TO GNP BY INDUSTRY

YEAR	Private Investment	Public Investment	Total	Value added to GNP	Federal Investment	Contribution of Federal Investment	
	Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.	%
1970—71	1425.70	477.88	1903.60	5822.00	58.38	178.6	3.07
71—72	1235.40	78.50	1313.90	5777.00	27.38	120.4	2.08
72—73	1044.80	249.50	1294.30	7212.00	82.93	466.60	6.41
73—74	981.80	624.00	1605.80	9383.00	113.40	676.70	70.8
74—75	1380.00	1658.00	3038.00	12844.00	517.96	2189.80	17.05

Source : For Public Sector : Annual plans from 70-71 to 75-76.

For Private Sector: Annual plan 75-76.

Impact on Prices

Price Level is said to be a barometer of the state of any economy. It indicates the economic health of the country. Excessive rise or fall both are equally important and alarming. Therefore the success of a budgetary policy lies in its impact on the price level. If a high rate of growth is achieved without disturbing the price structure too much, then budget may be said to have attained the goal of growth with price stability. The preceding section deals with the impact of development budgets on production whereas in this section we will consider the behaviour of prices during 1970-75.

The table shows that during 1960-70, the index for wholesale prices (General) increased by 31% while during next five years i.e. 1970-75, it increased by 110%. Moreover, this is also evident that prices kept rising faster during 1970-75. The annual percentage rate of inflation was 4% in 1970-71 but increased to 26% during 1974-75. It appears that during the first two years, prices didn't increase by an unmanageable extent. But the period 72-75 is characterised with serious inflationary pressures on the economy. Cost of living Index based on 1959-60=100 was 105.71 in 1970-71 and increased by 5% approximately to 110.67 during 71-72. But the rate of increase got doubled in 71-72 i.e. 10%. Again in 72-73 and 73-74 the cost of living index increased by 30% and 27% over 71-72 and 72-3 respectively.²

Starting from 71-72, the major influences operating on the prices include a wage and salary increase, bottlenecks in the production stream and difficult supply position of certain essential items. Then 1972-73 bears the counter effects of devaluations, deficit financing and of course, the international inflationary spiral. The year 1974-75 saw an increase in the price of some essential items such as gas, kerosene, motor spirits, wheat, sugar and vegetable ghee. The factors responsible for price-hike during the period are of both types i.e. demand-pull as well as the cost-push. Taking monetary expansion, first of all from the list of demand-pull factors. Total monetary assets increased from Rs 2019.32 crore in 1970-71 to Rs. 3727 Crore. An increase of 85% took place during 1970-75 inspite of the fact that the country was reduced to West Pakistan only. An analysis of the causative

2. All these figures are based on data in Pakistan Economic Survey 1975-76.

TABLE No. 9
INDICES OF WHOLESALE PRICE

YEAR	General	Food	Raw Material	Manufacturers	Fuel Light & Lubricants
1960—61	104.77	106.30	108.20	99.23	99.10
1965—66	112.03	108.24	25.57	112.70	109.18
1970—71	137.32	136.50	133.23	142.33	137.08
1971—72	150.31	153.50	136.34	151.52	150.63
1972—73	179.74	189.05	157.81	170.75	182.20
1973—74	229.07	242.68	205.10	209.00	236.04
1974—75	288.89	302.38	232.13	284.85	314.24

Source : Pakistan Economic Survey 1975-76.

factors would show that the share of public sector in increasing total monetary assets is climbing up. Large part of such behaviour can be expressed in terms of deficit financing resorted to meet public expenditure. Using a one year lagged relationship between deficit financing and inflation, it has been found out that deficit financing explains 77% of the total inflation.³ Besides this, an increase in population also led to expanded demand especially for food items. On the cost push side, the factors responsible include the devaluation of Pakistani Rupee in May 1972. It has added considerably to inflationary pressures by increasing the costs of input. For example, the depreciation cost increased since most of the machinery is imported from abroad. It also made the problem of debts servicing more serious. Because of devaluation, the foreign currency loans were also reduced in rupee terms. The rupee cost of all imported materials also increased. The General Index of the unit value of imports which stood at 134.3, based on 1960-61=100, increased to 252.1 for the period July-Sept. 1972. Devaluation increased the value of our exports in rupee terms, unnecessary, therefore exports increased but the net availability of goods declined. For instance the wholesale price Index for 71-72 and 72-73 shows that in raw cotton, the price rise was 33% raw wool 29% hides 49%, skins 5% etc.⁴ Alongwith the effects and after-effects to devaluation, the increase in Money Wages, no doubt a very popular step, tended to raise the cost of manufactures instead of reducing the profit margins. Prices increased further and perhaps more than the rise in wages. Thus real wages were down even below the levels existing prior to such an increase. Thus as a compensatory measure, the increase in wages was demanded by most of the labour unions. In this way, the inflation in Pakistan has acquired a self-generating tendency. Compensatory increase in wages, allowed to offset rising costs of living, aren't matched with higher productivity. This keep the price spiral alive. However, dealing with the price increase during 1970-75, one must not ignore or under emphasize the effect of international factors on our economy. Most of the market-economy industrial nations of the world have been experiencing a double digit inflation which exceed 20% in some cases. Our country, since the separation of East

3. Current inflation in Pakistan, Hashmi S. A. & Faruqi A. Economic Journal, Govt. College Lahore (Summer 1975).

4. Pakistan Times dated April, 13, 1975.

Pakistan, has been engaged in international trade to a much greater extent. The surplus items which were exported to East Pakistan to meet their needs had to be sent to foreign markets. Similarly what we used to import from East Pakistan was now coming from abroad. Therefore any change in international prices was translated into our economy without much lag. Taking the case of indirect taxes, it has already been explained that the ratio of indirect taxes to total taxes has registered an appreciable increase. Direct taxation dampens the demand-pull effects by reducing the total disposable income while indirect taxation works in an opposite direction through strengthening the cost-push influences. Further, it also builds an inflationary psychology which is fed on its own. A strong positive linkage has been calculated between the two variables i.e. ratio of indirect taxes to the total and the rate of inflation.⁵

Finally we may say that though the impact of development budget on prices cannot be calculated so easily, yet a picture of change in the price level in the economy as a whole would indicate the direction in which the economy is marching. On these basis it may be said that domestic policies fabricated in the development budgets were, of course responsible for giving rise to inflationary pressures.

Concluding on the impact of development budgets it must be pointed out that these budgets didn't succeed much in increasing production and creating a stable price level. Both of these objectives should be attained simultaneously. Price stability at the expense of slowing down the growth rate in production can never be acceptable to people. And, on the other hand, growth with high rates of inflation is self-defeating and it cannot take the form of a self-sustaining process but ends after some time.

Therefore it appears that the required strategy for growth in future should not take the question of rising prices lightly rather it must be accorded top priority.

5. Ibid Hashmi S.A. & Faruqi A.

Book Review

ECONOMIC STRUCTURE OF PAKISTAN*

There is no dearth of economic literature on Pakistan. What was essentially lacking was an effort for compiling the latest statistical informations and economic data about various spheres of the economy in accordance with the changing patterns of economic conditions of Pakistan. Professor Khawaja Amjad Saeed therefore realizing this requisite presents a coherent treatment of the economic structure of Pakistan in a theoretical as well as pragmatic way. This was also being necessitated owing to the so many structural changes during the last few years, such as the adoption of a goal of social justice with growth and more emphasis on widening the role of public sector in economic activity.

The author's approach is beautified by the avoidance of all unnecessary details and putting the material in a comprehensive manner. It is further fanned by the small introductions given in the beginning of each chapter describing basic economic concepts. Then a long list of tables stating up-to-date figures about the economic structure of Pakistan is indeed very helpful, particularly for students.

He starts with the description of characteristics of LDCs, albeit in an orthodox nonetheless, useful manner, with giving necessary informations about the growth of the national economy since independence in a useful way.

The redeeming feature of the book is the concern shown by the author for the Economic System based on Islamic principles. But just two pages are incapable of grasping the whole Islamic Economic system and the concept of interest-free banking. Further, he does not present various Islamic principles in a manner in which these ought to be presented. Just to say that Islamic economic systems will find its base in Holy Quran is not sufficient, in

*By Khawaja Amjad Saeed, Taxation and Accountancy Institute, Lahore, 1977.

our view it is a good alibi, unless one describes the various broad Islamic Economic principles in a quantified manner, one cannot visualize the picture of an economy. Similar is the case with the idea of interestless banking which needs more attention than given by the author.

All LDCs in general and Pakistan in particular are under a continuous pressure of increasing population. Relevant material on this subject therefore helps in understanding the nature of the problem. Remarkable is the distinction drawn by the author between Population Planning and Family Planning. "But now it has been realized that Family Planning by itself cannot produce the results it seeks, a broad decline in birth and decrease in overall population growth rates. The programme has therefore been redesigned as population planning". He also takes a close look on the dire consequences of population growth, on the economy of Pakistan.

Agriculture in Pakistan holds a key position. Hence he makes a compact analysis of the agrarian set-up of the country, by giving the latest position of various crops and narrating various bottlenecks in this regard. An appraisal of 1978 Farm Policy is also very fruitful. Inputs in agriculture have direct bearing on productivity, various problems in the context of availability of agricultural inputs have also been dealt in a satisfactory manner. Not only at present but in the past there has been a call for rural development. The author presents a good summary of various measures taken by various governments in this connection and also makes certain valuable suggestions. One however will find that there is a relative neglect of the concept of agricultural planning and problems confronting it.

Then the author goes to industrial structure of Pakistan. Basic informations about the four corners of industrial sector have been given to the reader, such as a summary analysis of various industrial policies followed in the past and the new trends in industrial development. Current position of key industries has been analysed, proper attention has also been devoted to the problems and progress of nationalized industries. A picture of mineral resources of the country stating the current position is also very helpful.

Then he passes on to review the planning experiences of Pakistan, at first considering the strategy adopted for development during 60s, which to him failed due to neglect of social justice, neglect of human

resources etc. Moreover, discussing the development models he has done a good job. He criticizes the work of the Planning Commission in adopting Harrod-Domar growth model, since it takes no account of labour force. Further he makes a detailed study of planning procedures of Pakistan, the objectives and machinery of planning. This has been made more relevant by including the Annual Development Plans, since 70s, which present a good guide for understanding the strategy of development after 70's.

Pakistan at present is confronted with an intensified inflationary pressure. Infact, it is a sort of stagflation, i.e. inflation coupled with increasing unemployment. The next part deals with this specific problem and with monetary expansion, which holds direct relationship with inflation and price hike. A good discussion of various policies adopted with certain recommendation is worth-mentioning. He believes "there is need to help develop consumer resistance so that a check is enforced against arbitrary increase in prices." Which no doubt seems to be a workable solution the of problem combined with other policy measures.

Coming towards the international scene the author makes a review of policies followed in the past such as industrialization via import substitution. Then certain other domestic policies for exports promotion and various import policies are analysed while suggesting measures for promoting exports. A chapter on barter trade is also very useful. Another current concern touched by him is the state of energy conditions in Pakistan. He holds the opinion that use of energy which is one of the indicators of development is not so encouraging in Pakistan.

An analysis of taxation structure in a traditional manner is also beneficial to comprehend the state of affairs in this sphere. The problems of foreign aid and debt servicing, very crucial for a LDC like Pakistan, have ably been dealt by the author by taking a look at the various forms of foreign aid available to Pakistan, then debt servicing ratio, review of current foreign assistance both from muslim countries and other sources. In this regard the consideration of settlement of Bangladesh debt is worth-mentioning. Pakistan at present has the highest ratio of debt services to its foreign change earnings. The author in this regard suggests certain measure like cutting down of imports, enhancing exports and that the foreign aid should be turned into grants.

The distinguishing feature of book is a comprehensive look on structural reforms since independence, especially land reforms.

At current there is a debate to bridge the gulf between developed and underdeveloped countries i.e. third world. This third world is making demand for a new International Economic order. According to the author this realizations among LDCs stems from the reasons "that the technical and material resources of the world are disproportionately distributed resulting in uneven growth. Then the world market mechanism is being dominated by advanced countries. There countries therefore set up big monopoly enterprises exploiting less developed countries. Forther they impose tariff and non-tariff restrictions on goods from LDCs while these LDCs have to import goods from these countries. Then the world financial institutions are also under their control so they dictate their own terms and conditions in advancing loans and aid to LDCs, which provide opportunities for them to hold their economic control on Ldes."

This discussion of new world economic order has great relevance for the conditions prevailing in all the LDCs, and especially for Pakistan. Pakistan being the leader of third world is the inherent protagonist of this cause. Hence this New International Economic order entails direct relationship with the economic structure of Pakistan. The author therefor realizing this necessity has included this in his book. He concludes by saying :

"Unity is nurtured by mutual accommodation. It is born out of the realization that in its absence every one's interest will inevitably suffer."

In short we can argue that Professor K.A. Saeed has produced a creditable study of economic structure of Pakistan, which is an excellent and fruitful addition to economic literature on Pakistan.

Bilal Abbas

