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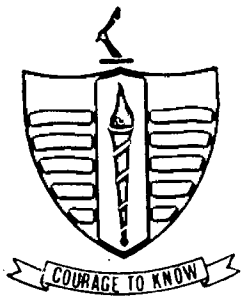

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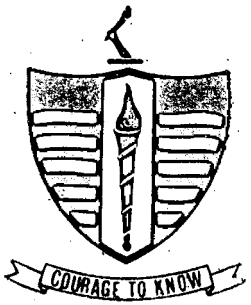

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DEPARTMENT OF ECONOMICS
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PAKISTAN :

THE DEEPENING ECONOMIC CRISIS

BY

Shahid Kardar*

The crisis facing the State of Pakistan today is gradually developing into a malignant cancer. The two main causes are political and economic. On the political front is the growing discontent and alienation of the youth and the regional elite of the two minority provinces of Sind and Baluchistan at not being given their due share of country's economic growth and prosperity; the bulk of the gains from development have been appropriated by the central ruling elite comprising mainly the Punjabis and some sections of the migrants who came from India on Independence in 1947(1). This article, however, concerns itself only with the economic aspects of the deepening crisis. But before we proceed to examine the economic tribulations of the State of Pakistan it would be appropriate to put everything into perspective by summarising some of the important economic and social indicators associated with the levels of development, to enable comparisons with similarly placed countries.

Although lying in the world's poverty belt Pakistan has a per capita income which, at U.S $ 390,

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is higher than that of 46% of the world's population.(2) However, despite the apparently impressive economic performance since independence, and especially in the last ten years, it still has one of the highest infant mortality rates in the world at 119 per thousand. It has a female literacy rate of 6% and an overall adult literacy rate of 24%,(3) which means that it is in the lowest quartile of developing countries. Whereas its neighbouring developing countries have primary enrolment of 70% to 90% its own ratio is barely 50%. The State only allocates 2% of the GNP and 12% to 15% of public expenditure in other Asian countries.(4) It has an economy in which almost 40% (representing 45% of rural and 25% of urban) of the households live below the poverty line, and can not satisfy their minimum nutritional needs. Over 65% drink unhygienic water resulting in 40% of the deaths, while the health sector has one physician and one hospital bed for every 3460 and 1800 persons, respectively.(5) Even these statistics do not reveal the plight of the rural health structure as almost 70% of the expenditure on health is spent in the urban areas where huge sums of public and private money are being spent on hospital complexes. A massive 84% of the population does not have drainage and sanitary facilities while 81% of the housing units have, on average, 1.5 rooms per 7 persons.(6)

Of the progress that the country has experienced during the last 10 years (1975/76 - 1985/86) the following statistics provide an indication of the pattern of growth. An analysis of the increase in per capita income of 41.8% at 1959-60 prices reveals that whereas the increase in commodity production, i.e., agriculture and manufacturing, was 27.7%, the

increase in the national income diverted to defence and administration was 47.8%.(7) Whereas the contributional share of agriculture and industry in GDP fell from 44.8% in 1976-77 to 41.1% in 1986-87, the proportion of national income absorbed by defence and administration rose from 8.9% to 9.3% over the same period.

The surplus generated domestically from the adoption of green-revolution technology and the State provided subsidised manufacturing capacity of a highly pampered industrial sector, heavily protected from external competition and provided with a whole range of incentives, has been appropriated by a small segment of the community, the owners of the means of production,, those with high-level skills, those with political and social clout, i.e., the large landowners, the industrialists, the lawyers, architects and accountants, and the senior officials in the military and civil bureaucracies. And this surplus is being frittered away on the consumption and production of luxury consumer goods, like cosmetics, high quality fabrics and fittings for urban construction, beverages, baby food, confectionery, fancy packaging for ice-creams, high quality houses, imported or smuggled goods like motor cars, VCRs, air conditioners, and other electronic gadgetry, etc., - and frequent trips abroad. This surplus could have been expropriated by the government, through its fiscal policy, for carrying out important infrastructural development programmes, etc. But this did not happen. The reasons for the failure and the continued inability of the regime to introduce such programmes are dealt with in detail below.

The Principal Policy Measures :

The main planks of the economic policy since 1977 have to a considerable extent been determined by the IMF, the World Bank and the USAID (since 1983), on whose funds a significant proportion of the economic growth and the increase in government expenditures were dependent. The basic policy measures were as follows:

(i) Reductions in taxes of the higher income groups and the corporate sector, on the assumption that this would improve tax compliance and raise national savings required to fund the growth process.(8) Whereas the urban rich were granted these tax reliefs, the agricultural income of the landed elite continued to enjoy exemption from taxation.

(ii) Resources to finance the government's expenditure (non-development and development) to be met by: (a) regular revisions in the administered prices of goods and services provided by public sector agencies, for improving their profitability. For example, the periodic, almost annual, increases in electricity, gas and fuel tariffs, introduction of higher user charges for education and health, etc.(9); (b) withdrawals of some consumption related subsidies; (c) higher indirect taxation; (d) a massive increase in borrowings, both internally and externally; (e) deficit financing.

(iii) Downward adjustments in the value of the rupee and the provision of other subsidies to maintain

the competitiveness of exports, both of agricultural commodities and industrial goods.

(iv) Rolling back of the frontiers of State involment in the economy with the responsibility of pushing up economic growth shifted to the private sector.(10)

(v) Domestic and foreign capital to be provided incentives to tap the potential market for consumer durables and luxury goods arising from the increase in after-tax incomes of the rich following the income-tax reliefs and attempts at simplification of import procedures. Import of plant and machinery, raw materials, parts and components used in the production of such consumption goods (whose manufacture had *hitherto* been discouraged) was not only made easier, the import duty rates (custom duties and sales taxes) applicable on them were also lowered-for instance, the components used in the manufacture of motor cars and air conditioners.(11)

It should be fairly obvious that these measures were not adopted entirely at the insistence of the IMF, the World Bank and USAID. They coincided with the desires and aspirations of the entrenched socio-economic groups which have acquired power since independence, and especially since 1977.

Declining Government Revenues and Rising Expenditure :

It has been suggested above that the benefits of agricultural and industrial growth, and government

investment promotion incentives and schemes, have been siphoned off by a small section of the population. These groups did not share their prosperity with the State.There has been secular decline in their contribution, in the form of direct taxes, to the government development expenditure programmes and social welfare schemes, such that the total tax revenue to GDP rate of 13% is much lower than that in similarly placed countries. However, while their contributions were declining there was a relentless increase in the government's annual non-development expenditure.

Although government revenues grew 3.4 times between 1977-78 and 1985-86, they were mopped up by the increase in recurring non-development expenditure,which rose 3.8 times. In fact, by 1984-85 tax revenues were no longer financing even the government's annual running expenses. Whereas total revenue collections as a percentage of GDP grew by barely 1.9 percentage points from 14.6% in 1976-77 to 16.5% in 1986-87, the non-development expenditure as a proportion of GDP grew by 5.5 percentage points from 13.4% of GDP in 1976-77 to 18.9% in 1986-87, at 19% per annum. As against this upsurge in current expenditure , development expenditure grew only 2.4 times(12); development expenditure as a percentage of GDP fell from 10.4% in 1979-80 to 7.6% in 1983-84, 7% in 1985-86 and 6.4% in 1987-88.(13)

The main increase in current expenditure was in the components of defence,administration and debt servicing. As a result, the expenditure on defence today is higher than the expenditure incurred by all the low, and middle income countries. Expenditure on

defence has risen from 5.2% of GDP in 1976-77 to 7.3 by1985-86 (Rs. 364 per capita). The combined impact of the elements of defence and debt servicing, as a percentage of total annual operational/current expenditure of the Government , has risen from 61% in 1978-79 to 75% in 1980-81, 78% in 1984-85 and 84% in 1986-87,(14) with interest on domestic and external debt rising from 8.2% of total expenditure in 1977-78 to 15.3% in 1986-87.

One of the main reasons for this depressing state of affairs is, as has been suggested above, that the Government's tax revenues have not kept pace with the increasing demands on the State for providing physical and social infrastructure. They have dropped from 14% of GDP in the late seventies to 13% in 1986-87. The sharpest decline has been experienced in the category of income tax. Direct taxes to GDP fluctuated between 2% to 2.7% during 1980-81 and 1984-85%, in 1985-86 they dropped to 1.9%, and to 1.8% in 1986-87, representing only 13% of total tax receipts(15). One of the reasons is that a huge chunk (approximately 28%) of the national income contributed by agriculture is exempt from income tax (and continues to enjoy this exemption even after the introduction of a security facility, like crop insurance, in the 1987-88 budget). The other reasons are, the tax cuts referred to above, the large-scale evasion of income related taxes and indirect taxes, and the growth of the unorganised and small-scale sector which is considered to be a tax haven. Tax revenues are, therefore, rising at a much slower pace than the rise of incomes of those liable to tax.

Resource Crunch and Increased Borrowings

The rise in non-development expenditure and the tax concessions referred to earlier were partly financed by increasintg indirect taxes, by raising administered prices of public sector utilities, and by increasing user charges of social services like education and health. The balance was met by instituting cuts in real terms in development expenditure, by resorting to massive borrowings-both internal and external, and through deficit financing.

Evidence of the greater dependence on borrowings and deficit financing is furnished by three examples:

(a) Although under the Sixth Five Year Plan (1983-88) 22.7% of the Annual Development Programme (ADP) was to be financed from the Government's budgetary surpluses, the whole of the ADP has actually been financed by domestic borrowing.(16)

(b) The overall budgetary deficit rose from Rs. 14.6 billion in 1980-81 to Rs. 42 billion in 1985-86 and Rs. 52.8 billion in 1986-87, representing an increase from 5.3% of GDP in 1980-81 to 6.8% in 1983-84, 7.7% in 1984-85 and 8.8% in 1986-87.(17)

(c) The share of external resources in total finances for development expenditure increase from 42% in 1980-81 to 53% in 1986-87.

The primary reason for the State's lack of resources is largely on account of its own policy decisions and the interests it has taken upon itself to

serve, whereby the rich have got richer at the expense of the community as a whole. Not only has large scale tax evasion been allowed to continue more and more reliefs have been provided to the rich. This has resulted in personal and corporatte taxes contributing only 13% of total tax revenue by 1986-87 as against 16% in 1984-85, 18% in 1982-83, and 22% in 1969-70. (18) Instead of those who can bear the burden, the huge poverty stricken sections are being taxed. And the failure to accomplish this has deepened the fiscal crisis. The growing fiscal crisis, is therefore, structural and renders the State politically incapable of restructuring the economy.

From the discussion above, it is evident that resource mobilisation has become the basic constraint. With limited resources at its command to augment the development effort the government is hard pressed to even meet the needs of the replacing and extending infrastructure for energy, water and communications, let alone the need to respond to politically sensitive and pressing demands for improved education, health and other services promoting equity objectives.

Enhanced Private Sector Role

As indicated above under the strategy in operation the role of the domestic and foreign private sector was to be enhanced and the activities of the public sector were to be pruned. The strategy was to be supported, and to some extent financed by the external creditors - international lending and donor agencies, the foreign private sector, foreign manufacturers (through supplier loans, etc.).

However, the smooth operation of even this policy was hampered by the government's resource constraint. Because of resource shortfalls the Government had little option but to resort to borrowings from the market at increasingly high rates of interest. A variety of government sponsored instruments offer rates of return ranging from 15% to 17%. As such a return is generally available from investments in quick-return luxury consumer products or from trading activites (and those too illegal in nature). High interest rates are encouraging unproductive financing and trading, and investment in manufacturing facilities for luxury products like confectionery, cosmetics,etc.

The existing structure of interest rates is also favouring the class of rentiers at the expense of the industrial and business sections of society. Because of the interest rate structure, all round political uncertainty and confusion, and the loot and plunder mentality of the ruling elite, the rich savers do not appear to have any discernable liking to invest in risk capital. They prefer the security of rentier incomes. They are depositing their savings with public sector financial institutions in search of a certain risk-free return, and letting the Government perform the task of providing risk capital. Hence, it is the Government which has taken up the bulk of the risk of the private sector. The rich, ensured of return, are happy with this situation, as is the private sector which has got its risk capital. The State is providing the capital for the private sector to invest. The private sector is hardly contributing to the rise in private sector investment. The State is, therefore, taking the risk entailed in the

investment. It is the agency which will have to pick iup the debris of a failed enterprise.

There is another problem, however, facing expansion of industrial investment. Over the last decade the fabric of society and the structure of the economy has changed significantly. The consumption patterns were significantly affected by the migration phenomenon and the demonstration effect pushed up the demand for luxury consumer goods. Consequently, the economy witnessed a fairly long and sustained spell of accelerated industrialisation. With falling remittances there are signs of a slackening of the growth momentum and a tapering off of the initial upsurge.

Private investment can be induced only if it can earn a large enough return; which in turn depends upon the size of the market. With the kind of scenario (referred to above) developing in the horizon, and considering the strategy of widening income differentials, the market will only expand for a small number of items of luxury consumption as the rate of growth in the market for mass consumption goods decelerates. The negative features of the latter consequence will not be neutralized by the positive impact of the increase in market for goods consumed by the affluent. These goods are import intensive and the import requirement of raw materials, plant and equipment, technology, etc, eased by the government's policy to lower customs duties and by providing other incentives for these goods, cannot be financed by exports because of growing protectionism in an already limited international market for Pakistani exports and

the inherent incapability of the exporting industrial sector to finance its imports (see below).

Limited Opportunities for Exports

The domestic market has been the basic determinant of the pace, pattern and level of economic growth. For exports to become the driving force for raising the level of economic activity would require an astronomical increase in exports. Exports even today constitute under 10% of the GDP and have grown at only 4% per annum since 1983 as against the Sixth Plan target of 15%.(19) In any case, the markets of the developed countries are not quite open to the limited variety of goods exported by Pakistan. Pakistan exports a narrow range of products and the dependence on agricultural commodities (rice, fish and cotton), textiles, cotton yarn and cotton garments, carpets and leather and leather products has increased over time. These products proceeds in 1983-84 was 72.1%, 76.2% in 1984-85 and 77.5% in 1985-86.(20) The exports of these goods face all sorts of restrictions ranging from high import duties to quantity quotas. The protectionism covers a fairly wide range of products in which Pakistan has or could have the ability to compete, and these tariff walls are not going to be lowered in the foreseeable future.

As regards imports, over 80% comprise defence equipment, petroleum products, raw materials and plant and machinery, etc., required by the agricultural and industrial sectors which, except at very high cost, cannot be produced economically and efficiently at home because of the small size of the domestic market. Neither can their imports be curtailed; they are

essential to the production processes and the manufacturing structre is dependent upon them.

Moreover, exports cannot meet the import bill. In fact the excess of imports over exports increased geometrically over time. This excess increased from 84.1% of exports in 1975-76 to 98.8% in 1982-83, falling to 83.5% in 1985-86 and 46.2% in 1986-87.(21) The narrowing of the gap since 1985-86 was partly the outcome of a fortuitious event, the sharp fall in the international price of oil in 1985-86 and partly owing to the recent break-through in cotton which resulted in almost the doubling of yields in 3-4 years. It was, however, primarily the average annual inflow of US 2.1 billion between 1977-78 and 1985-86 which kept the economy afloat by financing the bulk (approximately 75% to 80% throughout the eighties) of the trade deficit. With remittances declining(22) and the shrinking of the cushion that met most of these trade deficits, maintaining the present level of imports and growth rates will become exceedingly difficult.

The Dilemma of Increasing Dependence on Borrowings

As a consequence of the lack of adequate resources the Government's finances are in total confusion. The resource crisis having assumed frightening proportions, borrowings have served as the critical life-belt. The debt burden is now enormous, with debt servicing becoming an extremely expensive proposition. By 1986-87 the external debt had risen to US $ 12.4 billion and internal debt to Rs. 272 billion.(23) Taking into account the Govenment's estimates of borrowings for 1987-88, the total debt will

rise to 88% of GNP, 47% of GNP in the case of external debt and 41% of GNP for internal borrowings. Even though the external debt burden (which has been increasing at 15% per annum) has not assumed the crushing weight experienced by say Mexico and Brazil, it has reached levels where it has become a major impediment and obstacle to the adoption of growth promoting policies.

The debt servicing obligations of external debt have become prohibitive. Whereas in 1976-77, 87% of the fresh loans were required for this purpose. Export earnings will not be able to meet both the debt servicing requirements (which rose from 9.5% of exports in 1960-65 to 23.5% of exports in 1982-83, 26.3% in 1983-84 and 29.9% in 1985-86,(24) even after excluding the cost of servicing the publicly undisclosed military debt accumulated over the years), and the high import bill. Moeover, the continuous depreciation in the value of the rupee is worsening the burden of this debt. The 70% devaluation of the rupee between December 1981 and June 1987 has added Rs. 70 billion, Rs. 1 billion for 1986-87 alone, to the value of the debt.

The future recourse to external finance, however, is being constrained by the implications for the already strained foreign exchange reserves. The servicing charges of these loans are causing considerable difficulties and new loans are becoming less attractive because of the harsher political pressures are making the Government even more vulnerable to the desires of the donors, especially United States. Pakistan has been coerced into operating as the surrogate of US foreign policy and

global strategy. However, there are hardly any choices left but to ask for increasingly higher amounts of 'aid' Pakistan is, therefore, in danger of being drawn into the debt trap as foreign trade deficits continue to be financed by borrowings on harder terms.

The rise in domestic debt is also becoming a formidable problem. It has been increasing at 20 per cent per annum since 1979-80, from 25.8% of GDP in 1979-80 to 36.7% of GDP in 1985-86, with the interest cost of this debt growing at the rate of 28% per annum (from 2 percent of GDP in 1979-80 to 3.7% of GDP in 1986-87(25). The debt is being incurred at higher rates of interest (interest payments on domestic debt were 4.5% of the debt outstanding in 1979-80 and rose to 8.3% in 1987-88) and the interest burden has escalated sharply from Rs. 2.5% billion in 1979-80 to Rs. 23.8 billion in 1986-87, so much so that it now consumes 23% of the combined revenue of the Federal and Provincial governments. As a result, today almost 50% of annual additional domestic borrowings are used to meet the interest payments on domestic debt. Debt servicing has now overtaken defence as the largest single item of current expenditure. It even dwarfs the Government's programme for 1987-88. It is 28.3% higher than the budgeted ADP. Internal and external borrowings to meet fiscal and external trade deficits, therefore, have only exacerbated the scenario on both fronts in the absence of long term measures to mobilise revenues and to boost exports.

Lack of Employment Opportunities

The whole strategy in operation - austerity for the poor, liberalisation for the rich and the opening of

the economy to foreigners - will also result in the import of technology ill-suited to domestic resource availability - especially, the dire need for creating more job opportunities. An issue becoming increasigmly critical, and potentially explosive, with each passing day is the dis-equilibrium between population growth and economic growth.

In Pakistan the pattern of agricultural and industrial growth and the technology adopted in the production processes is such that it has become increasingly difficult for the economy to accomodate and provide productive employment to the burgeoning labour force. The problem posed by the existing production framework in the agricultural and manufacturing sectors is that even if pakistan manages to maintain the present growth rate, the economic structure will not be able to accommodate the backlog of unemployed young men and women, let alone absorb new entrants into the labour force, or the returnintg migrants, or providing productive employment to the underemployed millions. These and factors like the poor distribution of agricultural growth, lack of a broad-based demand for industrial products, the curtailment of public sector investment (especially on infrastructure), poor maintenance of infrastructure, and an industrial policy which has encouraged the creation of a high cost industrial structure, etc, are constraining the growth potential and the ability or capacity of the economy to provide productive employment.

Since the sixties and the introduction of the green revolution, land is being acquired for self-cultivation by the larger farmers, who have taken up

capital-intensive farming techniques. In 1960 farms above 50 acres representing 2.7% of the total number of farms occupied 18.5% of the area.(26) By 1980, according to the Agriculture Census, 1980, farms above 50 acres still represented 2.7% of the total number of farms but increased their farm area to 23.2%.

Greater mechanization is rapidly increasing the army of landless labour through the massive displacement of labour (there is a net loss of 8 jobs for each tractor used)(27). The decision to increase mechanization in agriculture has been influenced by the cost factor (mechanisation has reduced cost almost 10 times), by the difficulties faced in hiring large number of workers for short periods at peak times, and the problem of supervision of a large labour force while still maintaining a high level of efficiency and productivity.

A rough estimate suggests that during the seventies there was an increase of around one million landless households(6 million persons)(28). In the absence of a radical land reform this trend will continue as more and more labour is thrown on the unemployment heap. According to one study the demand for labour in agricultural will fall by almost 7 million households by the year 2002.(29)

The agriculture sector displaced unskilled labour for absorption by other sectors of the economy . However, the manufacturing sector employed only about 13.1% of the labour force in 1985, its share having fallen progressively from 15.5% during the late sixties(30) despite the increase in its share of the GDP from 16% to 20% during the same period. In fact, while

the agriculture sector was displacing labour.empolyment in the large scale industrial sector (employing around 30% of the manufacturing sector's labour force)(31) was dropping by 2.2% per year during the period 1976 to 1981 compared to an increase in real manufacturing output at 12.3% per annum(32). According to one estimate, jobs per unit of investment have been declining at 11% per annum since1977.(33) Manufacturing output, therefore, has all but stopped growing because of far reaching changes introduced in the modernisation of industry.

With the manufacturing and agriculture sectors shedding labour some of those looking for work were accommodated in the somewhat vibrant and expanding services sector. The expansion of the services sector was due in large measure to a sharp increase in the expenditure on defence and administration (see discussion above) and to a sharp increase in trading activities spurned by import liberalisation and the rather lax attitude of the Government to smuggling. The former was largely financed by inflows of external capital and remittances of Pakistani workers in the Middle East. However, with a slowing down in the net inflows of foreign capital and sagging remittances it is difficult to see how the growth in private services can be maintained.

Therefore, with the domestic economy unable to absorb the present job-seekers, the task of accommodating the 5 million likely to be thrown into the job market in the next five years looks even more daunting. And while there is a swelling up of the labour ranks, the rapid rate of population growth (3.1% per annum) threatens to tear apart the social fabric of

society in the not-too distant future. At this rate the local population will be 150 million by the year 2000. To provide such a huge populace with even the existing rudimentary and modest education, health, housing, drainage and sewerage and drinking water facilities and infrastructure like roads, energy, fuel, etc, will require resources which, on present evidence, appear to be beyond the generaton capacity of the Pakistan economy.

Obstacle to Growth :

The factors which are hindering the acceleration of economic growth can be summarised as under:

(i) The inability of the State to tax the rich and ensure tax compliance, to finance the military costs of a perverted foreign policy and the expenditure entailed in maintaining a large number (of 500,000 men) standing army.

(ii) A small domestic market because of policies which have perpetuated the poverty of a significant prportion of the population.

(iii) Lack of foreign exchange earnings required to pay for defence purchases and for imports used in the manufacture of upper class consumption goods.

(iv) The need to finance the servicing of foreign debt used for expansion of productive capacity, given the low rate of savings of the Pakistani industrial sector. The domestic savings rate of 5% to 7% is much lower than the rate of 16% to 23% of the

lower-income and lower middle income countries.(34) This is because the Pakistani industrialist consumes, in the form of larger cars, palatial houses, luxury goods, frequent trips abroad, etc, most of profits generated by industry.

(v) The slow pace of the industrialization programme. It is falling short of even the government's target. Although private fixed investment as a percentage of GNP increased at an average of 5.7% between 1983/84-1986/87 it fell far short of the original Sixth plan target of 8%.(35) Again the average annual growth in production till 1985-86 was 8.8% in textiles, stagnant in carpets, and minus 15.5% in the case of engineering goods, falling far short of the plan targets of 16.5%, 8:6% and 20.7% respectively.(36) Furthermore, there has been a deceleration in the annual compound rate of growth of the manufacturing sector from 10.8% during 1977-82 to 7.9% during 1982-86, and 7.4% in 1986-87,(37) much below what is critical for the economy's growth and for the absorption of the rising number of unemployed youth. The reason is partly demand constraint, both on account of the small domestic market and the poor response of international markets to Pakistani products. The slow growth in exports, apart from the narrow range of products exported is also due to Pakistan's failure to compete in price terms, the poor quality of the products and the barriers placed against its exports by the developed countries. The other reasons for widespread unemployment include the rapid increase in population, the inappropriate technology, the

mismatch in the supply of and demand for skills and the cultural values and attitude to work, of the educated unemployed in particular.

(vi) The rising inequalities in income. An examination of the Household Income and Expenditure Surveys (HIES) of 1979 and 1984-85, reveals that whereas the richest 20% households increased their share of the income from 45.5% in 1979 to 49.8% in 1984-85, the share of the poorest 20% households decreased from 7.4% to 6.1% during the same period. Further evidence is provided by the changes taking place in the industrial structure. Between 1976 and 1981 the share of labour in value added in the large scale industrial sector declined at 5.5% per annum (see References 32 and 33).

(vii) The progressive decline in the purchasing power of the less privileged sections. This process has been reinforced by the price hike as a result of substantial revisions in prices of utility services - electricity, gas, water, telephone, postage, etc., and the inflationary impact of the rapidly depreciating rupee and the deficit financing. The decline in purchasing power is evidenced by the fall in actual per capita consumption of foodgrains. Their per capita consumption of food grains has declined gradually from 456 gms in 1977-78 to 428 gms in 1980-84, despite an increase in productioin of 32.6% between 1977-78 and 1983-84 compared to a smaller increase in population (20%) during the same peiod.(38) In other words, despite the low calories intake of a substantial proportion of the population the

quantity of foodgrain consumption has actually decreased. Such is the vulnerability of the deprived to any increase in the cost of living. The decline in the buying power of the majority is also indicated by the almost stagnant per capita production of cotton yarn - 4.6 kgs per annum in 1969-70 as against 4.5 kgs in 1980-81 and 4.6 kgs per annum in 1984-85 and by the actual fall in per capita production of cloth in the small and large scale sector from 21.3 sp. meters in 1970-71 to 18.1 sp. meters in 1984-85.(39)

Moreover, the market for industrial goods, despite the temporary boom created by remittances has been shrinking over time. The different income groups are spending decreasing proportions of their income on manufactured products like clothing and footwear. For instance, the share of total monthly expenditure on food, beverages and tobacco was 48.6% in 1984-85, as against 51% in 1979 and 55% in 1971-72. On apparel and footwear the share in monthly household expenditure fell to 7.5% from 9.6% in 1979 and 10.6% in 1971-72. As against the progressive decline in the share of expenditure on essential wage goods, the share of house rent has increased to 11.3% from 10.8% in 1979 and 7.7% in 1969-70 and that in miscellaneous items - the most important of which are cost of transportation and fuel and lighing - to 26.5% from 28.8% and 26.1% respectively.40

CONCLUSIONS

For reducing the heavy dependence on foreign capital inflows and higher levels of domestic borrowing

and for stimulating growth the following will be required:

(i) A re-examination of the foreign policy, the role of the armed forces and their organisational structure and the need-necessity of having such a large standing army;

(ii) Radical land reforms, which apart from breaking the social and political hegemony of the landed elite in the rural areas, will also result in distribution of vast tracts of land to the landless, who can then be assisted by State sponsored incentives and assistance schemes;

(iii) Strong domestic institutions, greater decentralization of power and decision-making (not merely in the restricted sense of greater regional or provincial autonomy but in the more wider or broad-based context of devolution at the local level) and a political structure in which powers are with elected representatives rather than with the bureaucratic machiney, i.e., the civilian services should be made more accountable to the democratic institutions;

(iv) A massive increase in the education and health programmes to raise the productive skills of the poor and defenceless;

(v) A basic transformation of the rural and agricultural scene through the development of physical and social infrstructure, a good road/rail network, electricity, telecommunication facilities, schools, health centres, etc. - something which

cannot be performed within the existing socio-economic milieu, because the bigger land-lords appropriate most of the benefits accruing from such schemes and programmes.

(vi) Encouragement to mass production of wage goods - an activity which would be considerably facilitated by the change in the consumption pattern following a redistribution of land; and

(vii) Urgent steps to stem the rapid pace of population growth (a factor strongly correlated with the lack of education, poverty and sense of insecurity).

A failure to introduce these changes will result in the constraints and obstacles, referred to above, reinforcing the process which supports the existing trends and drifts to operate in a manner contrary to the objectives of a self-reliant, equitably distributed economic growth.

The above requires the revamping of the institutional structures. The problem, however, is that a small section of the community has been prospering and its income and wealth has been rising totally out of proportion with the modest increases, if any, in the incomes and assets of the other sections. And it is these rich, the feudals, the industrialists, the traders, the civil and military personnel and the well-to-do business executives and professionals who are unwilling to discharge their responsibility, to augment the resources of the State to promote development, with any degree of honesty. They are determined to retain all the gains that accrue to them from the various provisions made available by the State. With

the rich not willing to make their contribution, either to the State or to the creation of an industrial base that can provide job. opportunities and stimulate growth, the State has been lumbered with the responsibility to push up growth. A task which it is finding increasingly difficult to fulfil with its financial arteries dry. The powerful sections of society know that there are no short cuts to growth but they are determined not to contribute a fair share of the resources required to stimulate it. It is they who take all the key decisions and it would be naive to expect them to approve policies which, in any significant manner, weaken their hegemony.

Notes :

1. See Shahid Kardar, Alaqai Tazadaat: Bey Itmenany Key bunyadi Asbaab, Progressive Publisher, 1988.

2. Estimated from the World Development Report, 1987.

3. Pakistan: Sixth Plan Progress and Future Prospects, World Bank, 1987.

4. Pakistan and the World Bank, Partners in Progress, World Bank, Washington, Pages 12, 65 and 66.

5. Dawn EBR February 27 - March 4, 1988, World Bank, ibid, and USAID Report on Pakistan: Country Development Strategy Statement, 1988-93, April 1987, Page 15.

6. Housing Census, 1980.

7. Estimated from the Economic Survey, Government of Pakistan, 1987, Table 2.2.

8. In the period 1980-81 to 1987-88 the Federal and Provincial Governments in their different annual budgets took the following steps:

   (i). The tax exemption limit for personal incomes was doubled; it was raised from Rs. 12,000 to Rs. 24,000.

   (ii). The highest rate of personal income tax was lowered from 60% to 45%.

   (iii). Dividends earned from companies quoted on the Stock Exchange were exempted from income tax.

   (iv). The Gift Tax and the Capital Gains Tax were withdrawn.

   (v). The Wealth Tax exemption limit for individuals was doubled.

   (vi). The progressivity of income taxation was also reduced by introducing more and wider slabs.

   (vii). The tax rate of public quoted companies was lowered from 52.5% to 40%.

(viii). The tax liability of registered firms was also lowered by a minimum of 10%.

(ix) Amnesty from prosecution and tax penalties was granted to those who purchased special ruppee and foreign exchange bearer bonds (issued by the government) from their black money holdings. These bonds also carry a respectable rate of interest.

9. See Federal and Provincial Government Budgets of 1982-83 to 1987-88 regarding price increases of utilities and user charges. Subsidies for sugar and edible oils were withdrawn during 1985-86 and rationing of wheat was discontinued after 1986-87.

10. As stated in the Sxith Five Year Plan (1983-88), Government of Pakistan, and frequent statements of Government spokesmen.

11. Customs duties on components and parts of motor vehicles and air conditioners and import duties and sales taxes on VCRs were lowered in different budgets.

12. Estimated from the Statistical Supplement of Economic Survey, 1986-87, government of Pakistan, Table 2.3, 8.2 and 8.3.

13. Estimated from various issues of the Economic Survey.

14. Estimated from various issues of the Economic Survey.

15. Estimated from various issues of the Economic Survey, and the State Bank Annual Report, 1986-87.

16. Estimated from various issues of the Economic Survey, and the Sixth Five Year Plan (1983-88).

17. Estimated from the Economic Survey, 1987-88, Tables 2.3 and 8.1 and the Annual Report of the State Bank of Pakistan, 1986-87.

18. Estimated from various issues of the Economic Survey, and the Pakistan Statistical Year Book, 1986.

19. Estimated from the Economic Survey 1986-87, Tables 8.1 and 8.2 and The sixth Five Year Plan, 1983-88.

20. Estimated from the State of Pakistan's Trade, 1986-87, Government of Pakistan, Pages 47-48.

21. Estimated from the Statistical Supplement Economic Survey, 1986-87, Table 10.1

22. Remittances received through the official banking system rose from US $ 0.6 million in 1975-76 to US $ 1.4 billion in 1978-79, US $ 2.1 billion in 1980-81 and peaked at US $ 2.9 billion in 1981-82. Thereafter, they started declining, falling to US $ 2.7 billion in 1983-84 US $ 2.4 billion in 1985-86 and US $ 2.1 billion in 1987-88.

23. Econmic Survey, 1987-88, Page 62.

24. Estimated from Economic Survey, 1987-88, Table 11.3 earlier Economic Surveys and different annual reports of the World Bank on Pakistan.

25. Economic Survey, 1986-87, Pages 41-42 and Table 8.5 and the Budget, 1987-88.

26. Akmal Hussain, Land Reforms in Pakistan, Group 83 Series, February 1983.

27. Agricultural Policy and Rural Poverty in Pakistn, IFAD, 1987, Pages 156-159.

28. From the data available as per the Population Census, 1972, Agriculture Census 1972 and the Household Income and Expenditure Survey (HIES), 1971-72, it was estimated that around 1.5 to 1.6 million agricultural households were landless. The estimating procedure was as follows:

    According to the Population Census 74.6% of the national population resided in rural areas and given that there were 5.8% persons per household in the rural areas (as per HIES, 1971-72) means that there were 8.4 million rural households. Again, the HIES suggests that 33 to 34% of the rural households performed non-agricultural activities which implies that their were 5.5 to 5.6 million (8.4 million minus 33 to 34% of 8.4 million) agriculture households. As according to the Agriculture Census, 1972 there were 4 million farm households, therefore, there must have been 1.5 to 1.6 million (5.5 to 5.6 million minus 4 million) agricultural households without land.

A similar exercise performed using the HIES, 1979, the Population Census 1981 and the Agricultural Census, 1980 suggests that there were 2.5 to 2.6 million landless households in 1980. Therefore, between 1972 and 1980 there was an increase of one million households (2.5 million minus the 1.5 million derived above), representing approximately 6 million persons in the landless category.

29. Employment and Structural Change in Pakistan - Issues for the Eighties, ILO/ARTEP, 1986.

30. Labour Force Survey, 1985-86, Government of Pakistan.

31. M. Naseem, Underdevelopment, Poverty and Inequality in Pakistan, vanguard, 1981.

32. M. Irfan and M. Aziz Ahmed, Real Wages in Pakistan. Strucuture and Trends, 1970-84. Pakistan Development Review, vol. XXIV, Nos. 3 & 4 (Autumn - Winter, 1985).

33. Irfan and Ahmed: Changes in Output, Employment, Costs and Productivity, (Mimeo), 1986.

34. USAID Report, op. cit., page.11.

35. World Bank, Pakistan Growth through Adjustment, 1988 Table 1.2, and Sixth Five Year Plan 1983-88.

36. World Bank, 1987 op.cit., Table 1.7.

37. Economic Survey 1986-87, Page 82 and State Bank Annual Report, 1986-87.

38. World Bank, 1987, op.cit., Table 7.07.

39. Estimated from various issues of the Economic Survey.

40. Household Income and Expenditure Surveys, 1971-72, 1979 and 1984-85.

IMPORT-WEIGHTED INDEX OF PAK-RUPEE UNDER THE FLOATING SYSTEM AND ITS INTERPRETATION

BY

M. Mumtaz Malik and Iftikhar Ahmad*

With the advent of generalized floating system in Pakistan, it is imperative to focus on the movement of real effective exchange rates, which measures the average of Pakistan's bilateral exchange rates against its major trading partners, taking into account the offsetting relationship between inflation and exchange rates. The aim of this paper is to present an analysis of the import-weighted index for the Pak. Rupee, and to measure the competitiveness of Pakistan's exports in world markets which critically affect its balance of trade.

METHODOLOGY

The nominal effective import-weighted index for Pakistan would show the value of the Rupee against the currencies of those countries which account for bulk of Pakistan's foreign trade. The nominal index registers proportional changes in the official value of the rupee calculated relative to some base period. The base period taken in this paper is

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January, 1982, when the fixed exchange rate system was replaced by a multilateral floating regime using weights assigned to the countries on the basis of the proportions of Pakistan's import trade with them. The index presents a realistic and accurate picture of the effective purchasing power in the world market of the Pak. Rupee. Such an index is also extremely useful for measuring the success of the "trotting peg" policy i.e., a policy of mini-devaluations at regular intervals in order to maintain constant real incentives for traded goods industries taking into account the squeeze of relatively higher domestic inflation.

In this exercise, trade weights based on aggregate imports have been used as the import-weighted exchange rates for a developing country like Pakistan provide the closest approximation to effective exchange rates. There are two methods of calculating import-weighted exchange rate index. The first one is based on the arithmetic method where the bilateral weights are multiplied with the respective proportional changes in the bilateral exchange rates and the result is summed over the individual countries in the model. The second method, and the one used here, is the geometric method the mechanics of which are seen in the formula discussed below. One significant feature present in the geometric method but absent in arithmetic method, is that the choice of a different base date will influence the scale of the index at any point and not the percentage changes in it between different dates. The nominal effective index of Pak Rupee has been calculated according to the following formula:

$$\text{Index (j)} = \sum_{i=1}^{10} \left| \frac{xRT\,(ij)}{xRB\,(ij)} \right|^{w(ij)} x100$$

Where

$XRT^{(ij)}$ = Exchange rate of country i expressed in currency of country j at time T.

$XRB^{(ij)}$ = Exchange rate of country i expressed in currency of country j at base date b.

$W^{(ij)}$ = Weight of country i in the total imports of country j.

If inflation at home is higher in relation to foreign countries, the home currency must depreciate to compensate for higher prices, if the prices of exports are to remain competitive. Therefore, the nominal effective index is multiplied by the relative inflation index, to give the real effective exchange rate index, which represents more accurately the purchasing power of a currency in relation to other currencies. The import-weighted relative inflation index is a measure of the relative inflation in the home country, compared to an import-weighted average of inflation in other countries. There are various measures of inflation, however, the wholesale price index is better suited for the purpose of this exercise, the reason being that in international trade, it is usual to quote prices at the wholesale or industry level.

The relative inflation index of Pakistan has been calculated as following:

$$\text{Index (j)} = \sum_{i=j}^{10} \left| \frac{\text{WPIT (J)}}{\text{WPIT (i)}} \right|^{w(ij)} x100$$

Where

WPIT = Whole sale price index of country j (Home country) at time T using base date b.

WPIT(i) = Wholesale price index of country i at time T using base date b.

W (ij) = Weight of country i in imports of country j.

Having thus taken into account the rate of inflation at home relative to the rate of inflation among the major trading partners weighted by the share of each partner, the real effective trade weighted index has been obtained. Such an index provides greater accuracy and a far more realistic account of exchange rate movements revealing the effective extent of appreciation/depreciation when the domestic inflation rate is higher relative to the trading partners.

The real index is calculated simply by multiplying the nominal index with the relative inflation index.

Real Index (j) = Nominal Index (j) x Relative inflation index (j).

ANALYSIS OF IMPORT-WEIGHTED INDEX

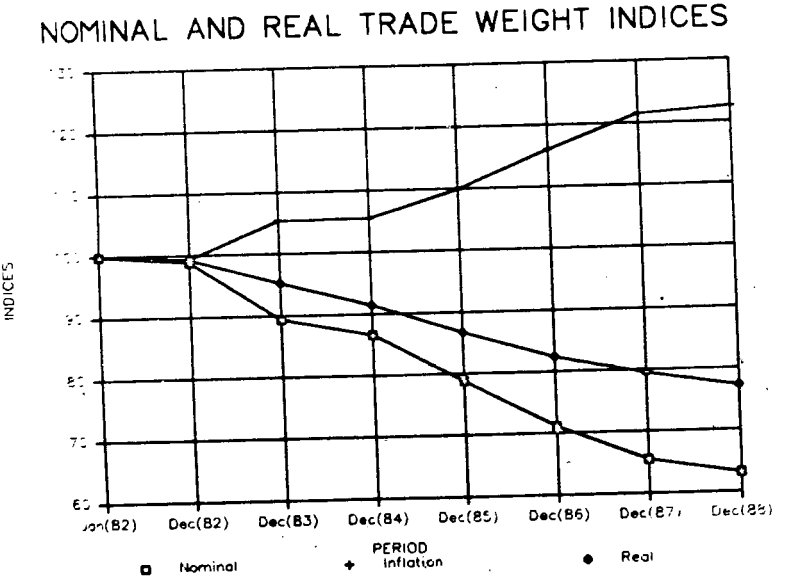
The nominal indices, relative inflation indices and real indices are reported in table I below covering

the annual movements in these indices from January, 1982 to December, 1988. Graphically the indices have been depicted in figure-1.

Table I

Nominal and real trade weighted indices

	Nominal Index	Inflation	Real Index
January 1982	100.00	100.00	100.00
December 1982	98.89	99.38	99.28
December 1983	89.40	105.47	94.29
December 1984	86.68	105.59	91.53
December 1985	78.89	109.89	86.69
December 1986	71.13	115.97	82.49
December 1987	65.48	121.4	79.53
December 1988	63.14	122.45	77.31



Pakistan's relative inflation index shows an upward trend, rising from 100 in January, 1982 to 122.45 in December, 1988. In other words, over the period under reference, wholesale prices in Pakistan have increased by over 22% more than the trade weighted increase in prices in the other ten countries included in this paper as Pakistan's principal trading partners (see Annex. II).The rise however, is gradual and efforts to curb inflation in Pakistan appear to have been fairly effective.

The nominal index point to steady and mini-devaluation at regular intervals. From 100 in January, 1982 nominal index fell to 98.48 in December, 1988 implying a nominal depreciation in the Rupee by about 63.14 over 37 percent during this period. However to the extent that Pakistan's foreign trade is diversified, looking at bilateral exchange rates will give a misleading picture of the exchange rate policy being pursued by the State Bank of Pakistan. This brings out the significance of pursuing the policy of generalized floating system as opposed to pegging to single currency.

Looking at the real index, it is apparent that Pakistan's exchange rate depreciated more than the difference in inflation rates, in relation to its major trading partners, and thus Pakistan effectively gained in competitiveness. However, there is a caveat to this statement. The analysis of gains or losses of export competitiveness in this paper is merely indicative. For a more precise estimate one would have to include the effects of tariffs, rebates etc. which is beyond the scope of this paper.

In concluding, the salient point remains that in observing the import-weighted rupee over the period January, 1982 -December, 1988 a rising relative inflation rate was discerned. It was also perceived that the government's policy has been to give an edge to Pakistani exporters and this policy has required substantial depreciation in nominal terms in order to offset the rising relative inflationary trend. The real index indicates the competitiveness of Pakistani exports (not necessarily in economic terms) in the world market. The import-weighted rupee can be seen to move downward in value offsetting the gradual increase in the domestic relative inflation index.

ANNEXURE-I

Country	Currency	Import Weights	Exchange Rate Per Pakistani Rupee							
			Jan,82	Dec,82	Dec,83	Dec,84	Dec,85	Dec,86	Dec,87	Dec,88
U.S.A	Dollar	0.114	0.098	0.078	0.075	0.066	0.063	0.058	0.057	0.053
U.K.	Pound	0.067	0.052	0.018	0.052	0.055	0.043	0.040	0.031	0.029
France	Franc	0.018	0.573	0.534	0.624	0.627	0.481	0.379	0.317	0.32
W.Germany	D.Mark	0.064	0.225	0.189	0.205	0.205	0.157	0.115	0.094	0.094
Italy	Lira	0.028	122.500	111.129	125.000	125.000	107.170	79.968	68.942	68.989
Japan	Yen	0.143	24.500	19.500	17.540	16.390	12.688	9.399	7.351	6.585
Saudi Arabia	Riyal	0.099	0.334	0.269	0.260	0.235	0.228	0.217	0.214	0.2
Switzerland	Franc	0.015	0.180	0.160	0.164	0.169	0.132	0.097	0.076	0.079
Netherlands	Guilder	0.011	0.247	0.209	0.230	0.231	0.177	0.130	0.105	0.106
Canada	Dollar	0.013	0.117	0.097	0.093	0.087	0.087	0.080	0.075	0.064

Country	Currency	Import Weights	Nominal Indices						
			Dec,82	Dec,83	Dec,84	Dec,85	Dec,86	Dec,87	Dec,88
U.S.A	Dollar	0.114	0.9743	0.9700	0.9559	0.9509	0.9420	0.9401	0.9323
U.K.	Pound	0.067	0.9947	1.0000	1.0038	0.9873	0.9826	0.9659	0.9616
France	Franc	0.018	0.9987	1.0015	1.0016	0.9969	0.9926	0.9894	0.9896
W.Germany	D.Mark	0.064	0.9889	0.9941	0.9941	0.9772	0.9580	0.9457	0.9457
Italy	Lira	0.028	0.9974	1.0006	1.0006	0.9963	0.9881	0.9840	0.9841
Japan	Yen	0.143	0.9679	0.9533	0.9441	0.9102	0.8720	0.8419	0.8287
Saudi Arabia	Riyal	0.099	0.9788	0.9755	0.9658	0.9629	0.9582	0.9569	0.9505
Switzerland	Franc	0.015	0.9982	0.9986	0.9991	0.9954	0.9908	0.9871	0.9877
Netherlands	Guilder	0.011	0.9982	0.9992	0.9993	0.9963	0.9930	0.9906	0.9907
Canada	Dollar	0.013	0.9976	0.9970	0.9962	0.9962	0.9951	0.9942	0.9922
			89.8910	89.3955	86.6838	78.8920	71.1284	65.4824	63.1426

ANNEXURE-II

Country	Currency	Import Weights	Whole Sale Price Indices (1980 = 100)							
			Jan,82	Dec,82	Dec,83	Dec,84	Dec,85	Dec,86	Dec,87	Dec,88
U.S.A	Dollar	0.114	111.7	111.9	113.9	116.2	116.4	111	115.9	121.4
U.k.	Pound	0.067	125.1	124.4	127.3	134.9	141.9	147.9	153.6	161.2
France	Franc	0.018	127.4	126.8	146.1	159.9	160.3	163.7	168.8	174.3
W.Germany	D.Mark	0.064	115.1	115.1	117.1	120.4	121.5	115.7	116.1	118.7
Italy	Lira	0.028	140.6	139.9	152.8	165.3	175.2	172.1	181.2	189.8
Japan	yen	0.143	101.8	102.7	100.4	100.8	96.6	87	86.8	86.2
Saudi Arabia	Riyal	0.099	105	104	104.2	102.8	99	94.2	92.5	93.6
Switzerland	Franc	0.015	108.3	108.7	110.3	113.5	114.3	108.4	108.7	112.8
Netherlands	Guilder	0.011	117.5	116.9	119.8	124.2	124	120.5	117	119.2
Canada	Dollar	0.013	118.4	118.2	122.5	127.1	130.7	130.3	136	141.2
Pakistan	Rupee		118.1	116.8	131.5	134.5	143.5	150.7	165.9	172.3

Country	Currency	Import Weights	Whole Sale Price Indices (January 1982 = 100)						
			Dec,82	Dec,83	Dec,84	Dec,85	Dec,86	Dec,87	Dec,88
U.S.A	Dollar	0.114	100.179	101.970	103.133	103.312	99.373	103.760	108.684
U.K	Pound	0.067	99.440	101.759	107.834	113.429	118.225	122.782	128.857
France	Franc	0.018	99.529	114.678	125.510	125.824	128.493	132.496	136.813
W.Germany	D.Mark	0.064	100.000	101.738	104.605	105.560	100.521	100.869	103.128
Italy	Lira	0.028	99.502	108.677	117.568	124.609	122.404	128.876	134.993
Japan	Yen	0.143	100.884	98.625	99.018	94.892	85.462	85.265	84.676
Saudi Arabia	Riyal	0.099	99.048	99.238	97.905	94.286	89.714	88.095	89.143
Switzerland	Franc	0.015	100.369	101.847	104.801	105.540	100.092	100.369	104.155
Netherlands	Guilder	0.011	99.489	108.677	117.568	124.609	122.404	128.876	134.993
Canada	Dollar	0.013	99.831	103.463	107.348	110.389	110.051	114.865	119.257
Pakistan	Rupee		98.899	111.346	113.887	121.507	127.604	140.474	145.893

Country	Currency	Import Weights	Pakistan's Relative Inflation Indices						
			Dec,82	Dec,83	Dec,84	Dec,85	Dec,86	Dec,87	Dec,88
U.S.A	Dollar	0.114	0.9985	1.0101	1.0114	1.0187	1.0289	1.0351	1.0341
U.K.	Pound	0.067	0.9996	1.0061	1.0037	1.0046	1.0051	1.0091	1.0084
France	Franc	0.018	0.9999	0.9995	0.9983	0.9994	0.9999	1.0011	1.0012
W.Germany	D.Mark	0.064	0.9993	1.0058	1.0055	1.0090	1.0154	1.0214	1.0225
Italy	Lira	0.028	0.9998	1.0007	0.9991	0.9993	1.0012	1.0024	1.0022
Japan	Yen	0.143	0.9972	1.0175	1.0202	1.0360	1.0590	1.0740	1.0809
Saudi Arabia	Riyal	0.099	0.9999	1.0115	1.0151	1.0254	1.0355	1.0473	1.0500
Switzerland	Franc	0.015	0.9998	1.0013	1.0012	1.0021	1.0036	1.0051	1.0051
Netherlands	Guilder	0.011	0.9999	1.0003	0.9997	0.9997	1.0005	1.0009	1.0009
Canada	Dollar	0.013	0.9999	1.0010	1.0008	1.0012	1.0019	1.0026	1.0026
			99.3796	105.4737	105.5915	109.8912	115.0690	121.5496	122.4481

TOWARDS A PLAN FOR EMPLOYMENT GENERATION IN PAKISTAN

BY

Nazir Hussain*

1. Introduction

Unemployment situation in Pakistan has become more vulnerable and precarious in the recent years. It has rasied social, economic and political problems. Therefore a commitment to the objectives of eradiction of unemployment, poverty, illiteracy, hunger and disease is explicitly made in the latest development plan of Pakistan.

This paper attempts to bring out the present situation of employment, in the country : (1) its size; (2) composition; and (3) the employment generation capacity of various sectors of the economy and suggests various measures to mitigate unemployment problem.

Population and Labour Force

The estimated population of Pakistan at present is 106.8 million as on 31 December, 1988. It excludes about 4 million refugees from Afghanistan, Iran, Sri Lanka, Bangladesh, India, etc. It is growing at an annual rate of 3.1 per cent which is one of the highest

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rates in the world and is expected to increase more rapidly in the future years. It has increased over three-fold during the last three decades and is expected to double its present size in another about 25 years.

Rapid population growth has resulted in an increasingly young age structure. The proportion of the population under 15 years has risen from 40 per cent in 1951 to about 45 per cent at present while the relative size of the age group between 15 and 64 (working age) has declined from 57 per cent to about 51 per cent over the corresponding period. These changes imply not only an increase in overall dependency burden of young age groups but also have major consequeces for the provision of social infrastructure and services.

Of the present total population, 56.1 million are males and 50.7 million females. The sex ratio (males per 100 females) shows a declining trend from 111 in 1981 to 107 in 1986-87.

Rural population at present is estimated to be 73.7 million (69%) while the urban population is 33.1 million (31%) as against 60.4 million (71.7%) and 23.8 million (28.3%), respectively, in 1981. The urban population growth rate relative to the total is higher due to rapid rural-urban drift of population. The present trend of urbanisation, if not contained, is likely to result in additional burden on financing of urban development and provision of urban employment at the cost of rural development.

The country's literacy and school enrolment rates are very low. Only about 29 per cent of the

population knows how to read and write and about 64 per cent and 24 per cent of its primary and secondary school-age population, are enrolled in schools, respectively. Rural-urban and male-female imbalances are sharp. Only 22.1 per cent of the rural population against 46.5 per cent of the urban is literate. The literacy rate amongst female population is 15.5 per cent as compared to the male literacy rate of 34.4 per cent. Amongst rural females, literary rate is as low as 9 per cent as against 15.5 per cent in urban females. The primary enrolment rate for females is 46 per cent for overall and only 21 per cent in rural areas. The rural-urban differences are also present in the attained nutritional levels, the available health and shelter facilities, etc.

According to the latest labour force survey (1986-87), the country's total albour force is estimated at 31.4 million which is only 29.4 per cent of the total population. The labour force participation rate in Pakistan is comparatively low (Table - 1) and again reflects a high dependency ratio of the population. The female participation rate is extremely low as only 3.6 million (7 per cent) of the total females are accounted for in the labour force as against 27.8 million (49.6 per cent) males.

In the long run, increase in labour force is dependent on the additions to the population and its participation rate. While population growth has depicted an aceleration in its rates over the past four decades, the labour force participation rates, however, varied fro 32.6 per cent in 1963-64 to 29.4 per cent in 1986-87. [Table - 2].

Table 1

Population and Activity Rates By Sex of Different Developing and Developed Countries

Country	Year	Population	Activity Rate		
			Total	Male	Female
Egypt	1983	44038000	31.4	49.8	12.5
Bangladesh	1983-84	95208000	29.9	53.5	5.4
China	1982	1003790450	52.3	57.3	47.0
Indonesia	1985	164046988	38.9	50.0	27.9
India	1981	665287832	36.8	52.7	19.8
Japan	1986	121430000	49.6	60.7	38.8
Pakistan	1986-87	102238183	29.4	49.6	7.0
Nigeria	1983	92180000	32.0	43.1	20.6
Thailand	1984	50443100	53.0	55.9	50.1
Denmark	1985	5106972	53.9	59.4	48.6
Germany(FRG)	1985	60987000	47.6	60.3	35.9
U.K.	1981	55038870	47.3	59.5	35.8
Newsealand	1986	3261783	49.2	57.9	40.7
malaysia	1980	11426200	37.3	48.5	26.0
U.S.A.	1986	241081000	49.6	57.1	42.5

Source : Year-book of Labour Statistics, 1987, ILO

2. EMPLOYMENT STRUCTURE

According to the latest labour force survey (1986-87), out of 31.4 million labour force, 30.3 million (95.6%) are presently employed while the remaining 1.1 million (3.5%) are unemployed. Out

Table 2

Labour Force Employment.

(Million Nos)

Year	Labour Participation rate.	Labour Force.	Net Addition in Labour Force	Employed Labour Force.	Net Addition in Employment	Unemployed Million.	Unemployment Rate (% of L.F.)
1963-64	32.6	16.40	-	16.24	-	0.16	0.98
1964-65	32.2	16.65	0.25	16.47	0.23	0.28	1.08
1965-66	31.8	16.91	0.26	16.70	0.23	0.21	1.24
1966-67	31.4	17.17	0.26	16.93	0.23	0.24	1.40
1967-68	30.9	17.44	0.27	17.17	0.24	0.27	1.57
1968-69	30.5	17.71	0.27	17.40	0.23	0.31	1.75
1969-70	30.3	18.11	0.40	17.75	0.35	0.36	1.99
1970-71+	30.4	18.70	0.59	18.37	0.62	0.33	1.76
1971-72	29.9	18.94	0.24	18.55	0.18	0.39	2.05
1972-73+	29.8	19.61	0.67	19.24	0.69	0.37	1.89
1973-74+	29.6	20.12	0.51	19.76	0.52	0.36	1.79
1974-75	29.5	20.64	0.52	20.30	0.54	0.34	1.65
1975-76+	29.9	21.54	0.90	21.08	0.78	0.46	2.13
1976-77+	30.3	22.48	0.94	21.89	0.81	0.59	2.62
1977-78+	30.6	23.46	0.98	22.73	0.84	0.73	3.11
1978-79	31.0	24.49	1.03	23.62	0.89	0.87	3.55
1979-80+	30.8	25.07	0.58	24.15	0.53	0.92	3.67
1980-81+	30.6	25.65	0.58	24.70	0.55	0.95	3.70
1981-82+	30.4	26.27	0.62	25.27	0.57	1.00	3.81
1982-83	30.2	29.91	0.64	25.85	0.58	1.06	3.90
1983-84+	30.0	27.45	0.54	26.40	0.55	1.05	3.82
1984-85	29.6	28.00	0.55	26.96	0.56	1.04	3.71
1985-86	28.7	28.05	0.05	27.02	0.06	1.03	3.63
1986-87	29.4	29.60	1.55	28.69	1.67	0.91	3.05
1987-88	29.4	30.99	1.39	29.89	1.20	1.10	3.55
Net Additions		-	14.59	-	13.65	-	-

Source : (i) L.F. Surveys (Various Years).

+ For these years LFS was not conducted. The numbers are based on interpolation.

of the employed, 22.1 are in rural areas and 8.3 million are in urban areas. The sex-wise distribution of employment is 26.9 million males and 3.4 million females.

About 21.4 million (70.6%) of the employment constitute non-wage or informal employment which includes self-employed (44.1%) and unpaid family helpers (26.5%) [Table - 3]. A major portion of this informal employment belongs to rural areas (80%). Wage employment is only 8.3 million (27.5%). Out of this 2.8 million are in the private sector.

SECTOR-WISE EMPLOYMENT STRUCTURE

The employment situation in major sectors of economic activity is given in [Table - 4]. Agricultural sector still accounts for nearly half of the employed labour force although its share is gradually declining. The share of this sector in total employment which was 60.5 per cent in 1963-64 has come down to 49.24 per cent in 1986-87. At present, 14.7 million (49.24 per cent) of the total employed persons are engaged in this sector. During the 5th Five-Year plan period (1978-83), 1.54 million jobs were generated in this sector. The sector thus absorbed about 45% of the addition in the total labour force (3.45 million) of the country during the same period. The situation during the 6th plan (1983-88) period worsened as only 1.09 million (26.7%) agricultural jobs could be created as against 4.08 million addition to the labour force. **[Table - 5]** The employmen-output elasticity decreased from 0.59 during the 5th Plan to 0.41 in the 6th Plan period. This declining trend is likely to continue in the process of economic development.

Table - 3

Percentage Distribution of Employed Labour Force by Major Industry Division, Employment Status & Area 1986-87.

Major Industry Division	Total					Rural					Urban				
	Total	Employer	Self Employed	Unpaid Family Helper	Employee	Total	Employer	Self Employed	Unpaid Family Helper	Employee	Total	Employer	Self Employed	Unpaid Family Helper	Employee
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total	100.00	1.91	44.13	26.50	27.46	100.00	1.37	45.65	31.94	21.04	100.00	3.33	40.06	11.95	44.66
Agriculture, Forestry, Hunting and Fishing	49.24	.80	21.45	20.81	6.18	65.24	1.01	28.36	27.82	8.04	6.37	.22	2.94	2.02	1.16
Mining and quarrying	.23	.01	.03		.19	.22	.01	.03		.18	.24	.01		.22	
Manufacturing	14.00	.27	5.55	2.22	5.96	9.05	.11	3.99	1.79	3.16	27.27	.69	9.71	3.40	13.45
Electricity,gas and water	.73		.05	.02	.66	.39		.04	.01	.35	1.63		.09	.03	1.51
Construction	6.01	.14	3.31	.31	2.25	5.86	.03	3.25	.33	2.26	6.40	.44	3.47	.26	2.23
Wholesale retail trade restaurants and hotels	12.05	.44	8.21	2.07	1.33	7.25	.12	5.36	1.05	.72	24.91	1.20	15.84	4.80	2.97
Transport storage and communication	5.25	.10	1.87	.29	3.00	3.55	.01	1.62	.31	1.59	9.81	.25	2.53	.22	6.80
Financing insurance real estate & business services	.77	.07	.07		.62	.18	.01	.03		.15	2.32	.24	.20		1.88
Community social and personal services	11.48	.08	3.48	.77	7.15	8.05	.01	2.87	.62	4.52	20.66	.19	5.11	1.15	14.21
Activities not adequately defined	.25	.01	.11	.02	.11	.19	.01	.10	.01	.07	.41		.14	.06	.21

Source: Labour Force Survey, Ministry of Labour and Manpower, Islamabad.

Table 4

In Pakistan Employment by Major Sector, (Million Number)

Major Sectors	1963-64	1966-67	1968-69	1969-70	1970-71	1971-72	1974-75	1978-79	1982-83	1986-87	1987-88
Agriculture, Forestry, hunting and fishing	9.83	9.04	9.71	10.12	10.58	10.63	11.12	12.43	13.63	14.13	14.72
Mining and Quarrying	0.01	0.03	0.005	0.02	0.05	0.08	0.03	0.03	0.03	0.07	0.07
Manufacturing	2.19	2.75	2.72	2.74	2.75	2.31	2.77	3.43	3.47	4.02	4.18
Electricity, gas & water	0.06	0.07	0.06	0.07	0.05	0.07	0.10	0.17	0.29	0.21	0.21
Construction	0.23	0.66	0.64	0.70	0.65	0.63	0.85	1.16	1.24	1.72	1.80
Wholesale & Retail trade& restaurants & hotels	1.23	1.90	1.80	1.75	2.00	1.83	2.25	2.62	3.09	3.46	3.61
Transport, storage & Communication	0.34	0.86	0.84	0.84	0.91	0.90	0.99	1.12	1.19	1.15	1.57
Financing, insurance Real State & Business Services	-	-	-	-	-	0.16	0.14	0.20	0.21	0.22	0.23
Community, Social & Personal Services	2.15	1.59	1.59	1.45	1.35	1.35	1.98	2.39	2.63	3.29	3.43
Activities not adequately defined	0.21	0.03	0.03	0.05	0.03	0.59	0.07	0.07	0.07	0.06	0.07
Total Employment	16.24	16.93	17.40	17.75	18.37	18.55	20.30	23.62	25.85	28.69	29.89

Source : Economic Survey, Government of Pakistan, 1988-89, Table 16.

Table 5

Additional Employment by Major Sectors n 5th and 6th Plan Periods

Sector	Absolute Increase (mill) 5th Plan	6th Plan	Compound Growth Rate/annum 5th Plan	6th Plan
1. Agriculture	1.54	1.09	2.43	1.55
2. Mining $ Q.	0.002	0.04	1.31	3.79
3. Manuf L.S.	0.044	0.141	1.31	3.79
4. Manuf S.S.	0.175	0.564	1.31	3.79
5. Construct.	0.16	0.56	2.80	7.74
6. Electr/Gas	0.14	-0.08	14.09	-6.67
7. Transport	0.11	0.38	1.96	5.70
8. Trade	0.57	0.52	4.16	3.16
9. Bank./Ins	0.01	0.02	0.98	1.84
10. Public Adm.	0.14	0.30	2.84	5.33
11. Services	0.24	0.50	2.84	5.33
Total	3.12	4.04	2.61	2.95

GDP Growth Rates by Major Sectors in Fifth and Sixth Plan

	5th Plan 1977/78-1982/83	6th Plan 1982/83-1987/88
1. Agriculture	4.1	3.8
2. Mining $ Q.	8.5	11.4
3. Manuf L.S.	10.5	7.5
4. Manuf S.S.	8.4	8.4
5. Construct.	7.1	8.7
6. Electr/Gas	9.0	8.8
7. Transport	7.5	7.7
8. Trade	7.5	6.7
9. Bank./Ins	5.7	7.3
10. Public Adm.	5.8	7.2
11. Services	6.1	6.6

(Continued)

Employment-Output Elasticities for 5th and 6th Plan Periods

	5th Plan 1977/78-1982/83 Plan	6th Plan 1982/83-1987/88	Average of 5th and 6th
1. Agriculture	0.59	0.41	0.50
2. Mining $ Q.	0.15	0.33	0.24
3. Manuf L.s.	0.12	0.51	0.32
4. Manuf S.S.	0.16	0.45	0.31
5. Construct.	0.39	0.89	0.64
6. Electr/Gas	1.56	-0.76	0.40
7. Transport	0.26	0.74	0.50
8. Trade	0.55	0.47	0.51
9. Bank./Ins	0.17	0.25	0.21
10. Public Adm.	0.49	0.74	0.62
11. Services	0.47	0.81	0.64
Whole Economy	0.40	0.45	0.43

Source : Fifth and Sixth development Plans, Government of Pakistan, Islamabad.

Mechanisation and tractorisation in agricultural sector in Pakistan has come to stay and will continue. This process would result in certain desplacements and hence unemployment of workers, but it would also generate demand for new categories of jobs such as operators, drivers and mechanics, etc. besides higher incomes for the farmers. There is however no conlclusive evidence to show that the prevailing unemployment is mainly due to the factor of mechanisation alone. There are other factors which are equally important. The rapidity in the population growth rate, low levels of cropping intensity, land tenure system, inequalities in land distribution, limited arable land, lack of irrigation facilities, etc.

coupled with pull factors of the urban localities, especially for the rural educated and wage employment seekers and push factors in the rural areas lacking social and public amenities of life are all amalgmated into a scenario of deterioration in the employment generation capacity of the agricultural and rural sector of Pakistan.

Industry

At present manufacturing sector employs 4.18 million (14%) of the total employed, out of which about 0.85 million (20%) are in the large scale and 3.33 million (80 per cent) are employed in small scale industries.

While population and labour force grew at over 3 per cent per annum during the 1960s and 1970s, large scale manufacturing created at the maximum 150,000 jobs during each of these periods. Or alternatively, the sector that accounted for 24 per cent of total investment in the 1960's and 21 per cent in the 1970's absorbed only 3 per cent of the increase in the labour force in the first period and 2.6 per cent during the second period.

During the 5th Plan period (1978-83), 0.22 million jobs were created in the manufacturing sector, out of which small-scale sector generated 175,000 jobs whereas large-scale sector cold absorb only 44000 persons during this period. In the 6th Plan, a total of about 705,000 jobs were created, out of which 141,000 were in the large-scale sector and 564000 in the small-scale sector.

With a comparatively limited role that can be played by the large-scale manufacturing sector in employment generation, greater empahasis has to be placed on the small-scale industrial sector which has greater potential for employment generation. Moreover, in order to increase employment in large-scale manufacturing, much more investment is required compared to the small-scale industry,.

Construction

Another important potential sector for employment generation is the construction. At present, it employs 1.80 million persons (6.01%) of the total employment. During the 5th Plan, a total of 160,000 jobs were created in this sector, which increased to 560,000 during the 6th Plan period. The employment-output elasticity in this sector has increased from 0.39 to 0.89 over the two plan periods **[Table - 5]**

Transport

Like construction, transport sector has also exhibited great potential for employment generation during the last about ten years, as 110,000 and 380,000 jobs were generated respectively during the 5th and 6th Plan periods.

Trade

After agriculture and industry, trade sector is the largest employer as 12.06 per cent of the total employment is accounted for in the trade sector. During the 5th and the 6th Plan periods 570,000 and 520,000 jobs were created in the respective periods in this sector.

Services

This sector comprises of employment in financial, insurance, real estate, business, community, social and personal services, etc. and accounts for 3.7 million persons (12.25%) of the total employment at present. During the 5th Plan, 390,000 jobs were generated in these activities while in the 6th Plan as many as 820,000 jobs were created. The services sector, therefore, has generated more employment than any other sector mainly because of structural changes in the economy and expansion in the education during the 1980s.

Overseas Employmet Sector

Pakistan has experienced a phenomenon of emigration of its labour in the seventies and early eighties. It served as safety valve to release unemployment pressures in the country and also earned precious foreign exchange to ease to a great extent the balance of payments problem. During the years 1978-83, as much as one-third of the increase in the labour force in Pakistan was absorbed by migration to the Middle East. At its peak in 1982-83,

the official flow of remittances from the migrant workers was equivalent to 70 per cent of the country's total exports of goods and non-factor services. The flow of remittances to their households helped substantially improve the economic conditions of workers families and consequent poverty levels were reduced. Investments out of migrants' remittances also generated employment especially in construction and service sectors. Simultaneously, domestic wage rates increased due to skill shortages caused by abrupt changes in supply as a result of migration. Similarly, consumption pattterns, especially in relation to import of consumer durables, have been significantly affected by the migration phenomenon.

Both emigration and remittances have lately declined, with increasing return flow of migrant workers. Emigration has declined from its peak of 168,403 in 1981 to about 69,619 in 1987. Similarly, remittances have declined from 2.89 billion dollars in 1982-83 to $ 2.1 billion in 1987-88.

3. Unemployment Situation

Accoding to the latest labour force survey (1986-87), 1.1 million (3.5 per cent) are currently unemployed in the country. Of the total unemployed, about 605,000 (55 per cent) are those who are in need of immediate employment whereas the remainder about 500,000 workers are out of work due to illness or other factors or are temporarily laid off.

An open unemployment rate of around 3-4 per cent does not appear to be too high when compared to those prevailing in the developed countries. This is, however, a misleading indicator of the total unemployment because much of the employment in the informal and non-wage sectors is concealed as underemployment. Underemployment at present affects 10.04 per cent of the employed labour force [Table - 6]. Those working less than 35 hours a week are considered underemployed. So, the total percentage of unemployed and underemployed work force comes to 13.54 giving a total number of 4.3 million. In addition, about 12 per cent of those who are reported as employed in fact are not satisfied with their current jobs. Thus, approximately a quarter of the labour force needs improvement in their employment situation, a large majority of which is concentrated in rural areas drifting gradually to urban areas.

Much more important than the number of unemployed or underemployed is their distribution by areas and categories of sector, occupation and education. The proportion of illiterate unemployed labour force is always higher in the rural areas as compared to the urban areas, while the reverse is true in the case of their level of educataion.

Of the total openly unemployed persons, 0.56 million (50.5 per cent) have either no education at all or are below primary education; 0.3 million (29.4%) have primary but less than matric education; 0.18 million (15.98%) matric but less than graduate, and 45000 (4.1%) degree holders and above. The highest

Table 6

Unemployment and Under-Employment, 1968-69, 1986-87
(% of Labour Force)

Year	Unemployment Rate			Under-Employment	
	All	Rural Areas	Urban	Working less than 35 Hrs/Week All Areas	
1	2	3	4	5	
1968-69	2.1	1.7	3.5	14.0	
1969-70	2.0	1.8	2.9	8.3	
1970-71	1.8	1.4	3.0	07.2	
1971-72	2.0	1.7	3.7	8.4	
1974-75	1.7	1.3	2.7	4.8	
1978-79	3.5	3.0	5.2	13.0	
1982-83	3.9	3.3	5.8	14.0	
1984-85	3.7	2.9	5.7	9.2	
1985-86	3.6	3.6	3.1	5.0	9.4
1986-87	3.5	2.5	4.5	10.04	

Source : Seventh Development Plan, Government of Pakistan, Islamabad

number of the educated unemployment is in matricand above categories. The phenomenon of educated unemployment is largely concentrated in cities as even the rural educated tend to swell the urban labour markets as employment seekers.

The above scenaraio reflects that output of the educational system in eighties increased sharply and this expansion was particularly significant in case of higher educated. At the same time, demand for the

educated persons did not grow proportionately with the supply of the educated.

Among the unemployed, the problem of unemployment among the educated youth, though small in number, is socially and politically more serious. For a considerable period the government was a source of white collar jobs. With the government seeking to limit its non-development expenditure and reducing the role of the public sector, the problem of finding jobs for the growing number of the edducated youth coming out of colleges and universities without appropriate skills is becoming serious. A large proportion of degree holders finds it difficult to obtain gainful employment not because they lack specialisation but due to the poor quality of the basic educational training which, in many cases, makes them unemployable.

On the other hand, the extremely low rate of literacy reflects a failure to create an effective demand for education especially for the female population. Furthermore, there is shortage of skilled manpower with practical training especially at the middle supervisory levels. There are certain occupations which are highly remunerative and in great demand but due to cultural and social values, people prefer to remain unemployed than to opt for such occupations. Some of these occupations are nursing, manual jobs like carpentry and construction work.

At the same time, the indirect evidence on unemployment, largely based on the popularity of certain white collar jobs, probably overstates the degree of unemployment particularly among the

educated. There are exaggerated notions about rewards of some jobs, particularly in the public sector, leading to pressures on such job, while the applicants already have alternative jobs or can find other productive use of their training and talent. The inordinate pressure to create such jobs reflects rent-seeking behavior on the part of a large proportion of the labour force, which can only be eased by fundamental social change.

4. Future Outlook

The prospects for the next five years (1988-93) show that the estimated total increase in the labour force during the 5 years would be of the order of 5.1 million. Net return migration is estimated at 0.4 million during this period. Accounting for the unemployed backlog of 1.1 million, the total labour force to be provided employment would thus be 6.6 million. It is estimated that the planned economic growth rate of 6.5 per cent per annum (at an output-employment elasticity of 0.41) would be able to generate 4.2 million additional jobs leaving 2.4 million still unemployed persons at the end of the 7th plan period, besidees a considerable proportion of underemployed labour force. This unemployment situation would be socially unacceptable.

Whether the above employment targets are achieved or not would depend on how well the plan is implemented and its targets realised. With the present set of policies and the pattern of growth, it would take a growth rate of roughly 8 per cent per year to absorb

the new entrants and the backlog of unemployed during the Seventh Plan. Alternatively, with the projected growth rate of GDP of 6.5 per cent per year during the 7th plan, a drastic change in employment policy sufficient to raise the elasticity somewhere around 0.5 would be required. Under the circumstances, both of the above propositions are difficult to achieve on account of ficancial and physical constraints.

It was one of the earlier beliefs of development planners that the process of economic development could provide a substantial growth of employment opportunities in the modern urban sector. At present one of the most perplexing and serious problems now confronting Pakistan is growing level of urban unemployment, especially those of the educated youth. Perplexing-because the level of unemployment has risen inspite of a rise in the rate of investment and an expansion in the output. It is serious because unemployment intensified social resentment and political unrest and also raises the queston whether development is occuring, even if GNP rises? And even if per capita income also rises, some might still not consider the economy to have developed if the number of unemployed has at the same time also increased.

In the foreseeable future real incomes in rural areas are likely to remain at 30% below those of the urban areas. Even in the face of open unemployment and under-employment in the cities, this income differential is sufficient to attract a continuous stream of migrart workers from rural areas. Only if income differentials can be significantly reduced this migration can slow down noticeably.

Resource allocation in the sectoral distibution of public sector development funds in the 7th plan is biased towards urban araeas. Per capita resource allocataion in rural Pakistan at present and in the 7th Plan is only 20% of that in the urban Pakistan.This further reduces the prospects of increasing incomes in rural areas. [Table - 7]. Development allocation to agriculture is extremely low as only 3.5% of the total public development budget is committed to this sector. [Table - 8]. There is therefore no doubt that unless the present rural-urban income differential is redressed in favour of rural areas, rural-urban migration will continue unabated.

Table 7

Per Capita Allocations Of 7th Plan Resources in Rural & Urban Areas

	Financial Allocation (Rs. Million)	Population 1988 (Million)	Per Capita (Rs.)
Total	350.00	106.8	3.28
Rural	112.2	73.7	1.52
Urban	237.8	33.1	7.18

Source : Seventh Plan Tables 16.1 (Page 355) and 7.2 (Page 320.

Table 8

Sectoral Distribution of Public Sector Development Programme

(Billion Rs.)

Sector	Sixth Plan*				Seventh Plan	
	Allocation		Estimated Actual		Allocation	
	Amount	Share	Amount	Share	Amount	Share
Agriculture	10.9	3.8	8.5	3.4	12.3	3.5
Fertilizer Subsidy	2.6	0.9	9.2	3.7	23.3	1.0
Industry	19.4	6.7	14.3	5.8	9.0	2.6
Minerals	5.4	1.9	1.2	0.5	7.0	2.0
Water	28.1	9.7	23.3	9.4	28.4	8.1
Power	78.8	27.2	54.3	21.8	90.2	25.8
Fuels	26.9	9.3	24.6	9.9	34.1	9.7
Transport & Communications	50.6	17.4	46.2	18.6	61.5	17.6
Physical Planning & Housing	13.7	4.7	24.8	10.0	20.0	5.7
Mass Media	1.6	0.6	0.7	0.3	1.8	0.5
Rural Roads	1.8	0.6	4.1	1.6	5.1	1.5
Science & Technology	0.9	0.3	0.7	0.3	2.8	0.8
Education	16.5	5.7	14.5	5.8	23.1	6.6
Health	11.4	3.9	10.6	4.3	13.3	3.8
Manpower	0.9	0.3	1.0	0.4	2.6	0.7
Culture Sports & Tourism	2.0	0.7	0.8	0.3	1.3	0.4
Population Welfare	2.0	0.7	2.1	0.8	3.5	1.0
Womens Development	0.7	0.2	0.4	0.2	0.9	0.3
Social Welfare	0.5	0.2	0.5	0.2	0.9	0.3
Research Statistics & Planning	0.3	0.1	3.0	1.2	1.0	0.3
Nongo's Programme	0.0	0.0	0.0	0.0	0.5	0.1
Employment Fund	0.0	0.0	0.0	0.0	2.0	0.6
Special Development Programme	15.0	5.2	3.8	1.5	25.3	7.2
Total	290.0	100.0	248.6	100.0	350.0	100.0

* At current prices

Source : Sixth and Seventh Development Plans, Government of Pakistan, Islamabad.

The generally favourable policy environment that the large scale manufacturing sector has enjoyed

in the past, including high import tariff protection, tax exemption, import privileges and so on, is expected to continue to encourage this sector to adopt highly capital intensive techology, thus limiting an already very low employment absorption capacity in this fast growing sector of the economy. In this context, the obvious solution lies in assigning greater role to the small-scale industries in employment generation.

One of the critical issues of employment is the quality of the existing labour force which reduces its employability in the fast growing sectors of industry, trade, services and financing, etc. due to its extremely low literacy level. This is expected to rise only marginally in the coming years unless massive efforts are directed in this field, not just towards the school age population but also and perhaps more importantly towards the adult populatoin.

The above analysis highlights the major trends affecting the future employment prospects of the country's workforce. In the following section various measures are suggested for improving the employment situation.

5. Measures to Promote Employment

To improve employment situation in the country, multi-dimensional efforts have to be made in a planned and coordinated manner on all fronts of the socio-economy. There is no short-cut to the problem except accelerated economic activity in all sectors of the economy, coupled with proper emphasis on human resource development

including training of manpower. In nutshell, industrial expansion and agricultural development has to take place at a sustained rate. Focus on increased production of small farms and accelerating the development of the small-scale industrial sector are important factors of generating more employment opportunities. The public sector enterprises' performance will have to be improved. Self-employment offers a potential field of employment generation and will have to be given a strong support. A broad-based skill development programme is needed to be evolved with the involvement of the private sector. Such a programme is expected to improve the overall employment-elasticity by focussing on sectors known to have high labour intensity. Above all, however, accelerated population growth is the fundamental supply factor adversely affecting the iemployment situation and must therefore be checked more seriously.

Rural Employment

It is well recognised that investment required to create a job in the formal urban sector is several times that required for job creation in rural areas. Every new job created in urban areas raises the income expectation of the rural population and results in 2 or more new rural persons to migrate to cities. Even a marginal drop in this income differential through the creation of additional income-generating opportunities in rural areas is likely therefore to bring significant and long-lastin rewards in terms of reduced inflow to the cities. The following measures in this context are therefore suggested :-

(i). Five year plans and programmes/projects flowing from them must aim at increasing not only production and national income but productive employment and more equal sharing of national income between rural and urban areas.

(ii). Broad based rural development means the transformation of stagnant and traditional villages into productive and dynamic rural economies. The future development priorities may focus on village and small town development/including extension of health and education services, expansion of local trade and commerce, organisation of cooperatives, the provision of credit, the creation of local industries for processing agricultural products, and the improvement of housing, water supplies, sanitation, roads, and communication etc. It also necessitates investment in many kinds of rural public works.

(iii). The development of rural based industries and commerical services will promote off-farm employment in rural areas. Non-farm rural enterprises may also expand because of the "multiplier" effect of increase in farm incomes. But government may have to take specific measures to encourage investment particularaly in food-processing industries in the rural areas. Promotion of rural industry will require the development of a middle class enterpreneurial skill in rural areas. Schemes for training of enterpreneurs in starting business identifying profitable industrial investments and for

provisions of credit fcilities and know how at the village level need to be developed.

(iv). It is relatively easy to build institutions for modern industrialization. But for rural development, the skills are uncertain, the organizational structures are not developed, the leadership is unidentified, and the techniques for motivating change are largely unexplored. A major effort may therefore be undertaken to build up knwoledge by setting up research and training institutes on rural industry in each province. The Institutes may also monitor and evaluate the progress of rural industrialization in provincial localities.

(v). Investment in rural public works and expansion of poublic services such as schooling, training, and public health have great potential. Large numbers of under-employed peasants, sharecroppers, and rural village dwellers can be engaged in building access roads, digging irrigation canals, constructing schools and health centres, and improving water supplies and sanitation facilities.

(vi). At present only 34% of Pakistani villages are electrified, and yet it is well recognized that village electrification was perhaps the major factor in the dissemination of tubewells in the countryside not well served by the irrigation canal syastem in the early 1960s. Electrification has also spurred the establishment of numerous mechanical workshops for tractor repair.

(vii). The share of development expenditure on education per person is 10% less in case of rural areas compared with urban areas. Educated rural people tend to migrate to the cities in search of clerical and administrative jobs, as well as for further and better education. Only the provision of additional job opportunities in rural areas which can make use of the skills of the educated rural people at remunerative salaries can arrest this trend. The compensatory incentives to encourage urban professional people to settle in the rural areas is necessary and need to be encouraged.

Employment in Agriculture

The main issue at present concerns the employment generating potential of the agricultural sector. Can this sector, in effect, maintain its present high level of employment. This will depend on several factors. The first is the anticipated structural change in this sector. A transformation to a high value agriculture will entail more emphasis on crops such as fruits and vegetables and on activities such as livestock rearing for meat and milk production. Both activities are highly labour intensive and a potential source of employment for labour that is becoming surplus because of the dynamics of modern agriculture. Equally important are the forward linkages of these activities with processing and packaging industries. In consonance with increased production, changing consumption patterns and export requirements, existing capacity in these industries will have to be substantially increased. To the extent that these industries can be located close to the source of supply

more rural employment will be generated. Marketing systems for horticultural and livestock products are relatively undeveloped. Employment opportunities will also arise when these markets are developed to accommodate the increased volume of produce. Although agriculture has made substantial progress in the past, there is still significant scope for further expansion in a number of areas such as:

(i). crop diversification into oilseed, fruit, vegetable and tea production, all products that are currently imported in large quantities to supplement insufficient domestic production.

(ii). agricultural diversification into income-elastic dairy and meat production, the supply of which is at present limited.

(iii). increasing cropping intensity which is still quite low compared with developed countries.

(iv). increasing input use which still remains at relatively low levels compared to countries at similar stages of development in South and South-East Asia.

(v). Investing in agricultural research particularly in disease and drought resistant high-yielding varieties of oilseed, fruit and vegetables and cotton.

(iv). the use of productive but more labor-intensive agricultural technology.

(vii). incentives for encouragement of small farmers.

Employment in Industries

Small scale industries have not only a large potential for generation of employment, but also produce a relatively higher level of output and exports. While investments in the small-scale sector during the period 1971-72 to 1987-88 accounted for only 11.9 per cent of the total investment in manufacturing their contribution to output was 26 per cent. The incremental capital-output ratio in large-scale industries (2.0) is almost ten times that in small-scale industries (0.2). Moreover despite their relatively low share in value added, small-scale industries account for more than 80 per cent of total manufacturing employment. The cost of an additional job created in the small-scale manufacturing sector is almost eighty times the cost of a job created in the small-scale industry.

However, small-scale industries suffer from a number of relative disadvantages in a modern society dominated by large scale industries. The most notable handicap for small-scale industries is the system of import of raw materials which generally favours large-scale industries. Small-scale industries buy their raw materials from commercial importers or recognised industrial importers at higher prices. Additionally, exports finance facilities are not extended to them. The progress towards deregulation and simplification of the procedures to import raw materials could be a great help for a large number of small-scale industries. The reduction of the level of duty on some of the raw materials widely used by small-scale industries would

contributes also towards lower costs. Following measures are important to improve employment situation in small-scale industrial sector:-

(i). There is a need for continuing identification of areas where small-scale operators can obtain orders for multi-national or large domestic units.

(ii). Creation of demand for the products of small-scale industries can play an important role. A national campaign is needed to develop markets for products of small industries while large industries can afford their own adevertisement budgets, small industries would need assistance in promotion efforts. A government sponsored publicity campaign with awards for innovation and excellence of design would be desirable.

(iii). Expansion of the small scale industrial sector in the rural areas offers greater opportunities of employment especially in the following areas:

-a). Agricultural processing equipment, such as small scale threshers, grinders, bagging equipment, oil presses, milk and other dairy produc equipment, etc.

-b). agricultural implements and machinery, such as small scale fertiliser equipment, weeders, pesticide sprayers, water pumps, tube wells.

-c). provision of semi-processed agricultural raw materials to maximise value added in rural areas.

-d). manufacturing of other components for further use by the large scale manufacturing sector.

(iv). Products from the small scale industries do not always find a ready market in urban centres and even in rural areas in many cases due to the poor quality of the consumer goods produced by them. A major effort is therefore required in research and development to come up with labour intensive technology which does not sacrifice quality. This is in fact more feasible because the basic industrial processes can remain heavily automated to preserve quality, whereas the technology for ancillary activities such as movement of raw materials and finished goods can be redesigned to absorb more labour rather than other forms of mechanical energy.

Employment in Construction

In all urban areas, construction has a great potential for employment generation. It offers perhaps the widest range of possibilities for substitution of men for machinens. Construction was observed to have a high employment-output elasticity in Pakistan and thus the direct increment to employment from its expansion is potentially larger than for other sectors.

Housing construction has a special emphasis in the Pakistan Peoples Party Manifesto. This focus shoule be on low-cost housing. Various elements of small houses can be standardised to give rise to supporting industries. In addition, special emphasis may be placed on the construction of roads. A programme for the construction of major national highway is already under implementation. Rules may be framed for encouraging the participation of the private sector in the construction of roads with the investment recovered through tolls. The construction activities implicit in the Seventh Five-Year Plan need to be carefully organised and phased with the objectives of maintaining a sustained level of employment during the plan period. The industry should be given incentives by the government in return for a commitment to employ engineers and other technical workers on a regular basis.

Self-employment

Due to resource constraints it may not be possible to make massive investment to create jobs for all the unemployed in the country. Self-employment therefore, could be an other best recourse to mitigate the problem. A major portion of unemployed labour force can be absorbed effectively if encouraged to resort to self-employment, The specific measures to boost up employment in this area are as under :-

(i). Self employment implies earning income direclty from one's own business, trade or profession rather than receiving a specified salary or wages from an employer. Pattern of

development and investment, therefore, has to be geared to promotion of self-employment.

(ii). Development of appropriate technology and its usage for promotion of self-employment both in the urban as well as rural areas needs to be undertaken.

(iii). Grant of loans and credit facilities to the self-employed need to be expanded, liberalised and facilitated through the enlargement of Youth Investment Promotion Society (YIPS) programme. At present very few persons among the self employed have access to institutional credit. Since they do not possess only tangible assets and securities their credit-wothiness cannot be established and the banks cannot provide them unsecured credit. It is, therefore, essential to provide special terms to the self-employed for obtaining credit.

(iv). A fund for promotion of self-employment may be set up which may advance them loans for improving their existing enterprises, establishing new enterprises, acquiring better skills and managerial capabilities, improving the transportation and marketing facilities for their products. Such a fund can be channelised through the Youth Investment Promotion Society (YIPS), small Business Finance Corporation to be set up Peoples finance Corporation in accordance with the PPP Manifesto.

(v). Improvement or re-orientation of technical skills, management techniques of the self-employed in conformity with the requirements.

(vi). Development of self-employment in small scale projects and enterprises with high utilisation of loval raw material. this would necessitated new approaches to the training of skills.

(vii). Development of agro-based, small scale, cottage and service industries which offer higher potential for employment of self-employed.

(viii). Development of small scale-industries within the frame-work of large scale industries and smaller markets within the frame-work of larger markets.

(ix). Development of cooperative societies for marketing of products, (their designing).

(x). Assistance from international financial institutions and multi-national and bilateral donors may be obtained to facilitate establishment of programmes and projects for self-employment.

(xi). Improvement and re-orientation of vocational and technical skills of women to increase their employability.

(xii). Expansion of facilities for the education, training, guidance and counselling of women seeking self-employment.

(xiii). Provision of credit facilities to self-employed women.

(xiv).. Drawing up of schemes and programmes for promotion of self-employment among return migrants with a view to facilities their gainful re-absorption in the country's economny.

Community Development, Peoples Participation and the Involvement of Non-Government Organisations (NGOS)

It is now well recognised that no governemtn can resolve the problems of poverty, disease and ignorance on its own. These problems can be better overcome by the involvement of the people themselves and by stimulating the NGOS to play an active role in the community development programmes. The government already accepts the community of farmers or city-dwellers as its foremost partners in development. The popularly elected representatives of the area should be in the fore-front in organising community development schemes, involving the participation of the area and attracting the collaboration of the NGOS to play an effective role in guiding and helping the people. At the root of community organisations should be the considerations like raising the incomes of the people, reduction of mortality of mothers and infants, raising the literacy levels of the community, reduction of malnutrition and morbidity, saving the natural environment, etc. The representatives should therefore identify small projects with the help of the local people in view of their felt needs and which can be implemented and

maintained by the community. The initial inputs can be contributed by the government. But initiatives also need to be taken to mobilize local financial resources. In villages, water supply schemes, drainage channels, irrigation facilities, link roads, storage reserviors, etc. may be the most popular demands and should be carried out through the multi-purpose village organisations and with the involvement of NGOS.

Already two community development programmes, namely Agha Khan Rural Support Programme (AKRSP) and Karachi Orangi Pilot Project (OPP), being implemented in Pakistan with the peoples participation and in which NGOS are closely collaborating, are working successfully. The concept underlying these projects derives from an attitude towards human concern, implicit in which is the faith in the people, and their potential to fulfil their needs by collective effort. Such efforts must therefore be encouraged by supplementing with government resources.

Overseas Employment

The Middle Eastern economies are moving from the stage of construction of infrastructure to manufacaturing, services and maintenance activities. Demand for skilled workers has not fallen but has increased. Detailed studies of the potential manpower markets and the type of skills that are needed in those markets need to be carried out. The private sector should be encouraged to develop training institutions keeping in view the changing pattern of manpower demand.

Productive reabsorption of returning emigrants in the economy is also important. Majority of these workers return with substantial funds, and a high level of accumulated skills. These factors could constitute the basis for a new entrepreneurial class. The government's responsibility in this context, will be to continue with de-regulation and liberalisation of the economy and to establish information system that will allow these migrants to invest in industry, trade, transport and agriculture.

Human Resouce Development

No factor will more critically influence Pakistan's long term future growth prospects than the development of its human resources. The major objective of an integrated approach to HRD planning is to ensure harmony in policies for creation of employment generation and investment in human capital for the production of educated and skilled manpower.

A training and skills programme will mark the beginning of a concerted effort to create a well trained skilled manpower base for the economy. The long-term solution to the problems of youth and the educated unemployed need to be found through more effective manpower planning. Some of the measures which need to be taken are as follows :-

(i). The annual output of skilled workers in government institutions, apprenticeship programmes and specialised training programmes of major public sector

establishments is estimated to be 19.8 thousand at the start of the Seventh Plan. This is expected to increase by about 25,000 per annum by the end of the plan period. The annual supply of semi-skilled workers during the Seventh Plan (including those in private institutions) is expected to be 39,000. These will be supplemented by an additional 40,000 skilled and unskilled workers annually from the inforrmal training system (ustad-shagird) during the Seventh Plan period. Given the expected increases in the demand for skills, the present programmes are clearly inadequate and may be expanded.

(ii). The government may consider to implement a programme which may direct 50 per cent of the school leavers to vocational institutions.

(iii). Another area of skill expansion can be through the apprenticeship training programme which currently has an output of only about 1,5000 per annum, mostly in Sind and Punjab. Uptil now, a number of industrial establishments have managed to circumvent the provisions of the existing apaprenticeship Training Ordinance, 1962, which regulates this programme. In view of the usefulness of the Apprenticeship programme, its coverage may be extended to the establishments employing 20 and above employees from its existing limit upto 50 employees. A rapid expansion of this program covering degree-level engineers and polytechnic diploma holders need to be undertaken.

Suitable incentives need also to be provided to both trainees and institutions to participtad in this programme.

(iv). To reduce the problem of educated unemployed a comprehensive programme of vocational guidance and employment counselling should be introduced.

(v). Arrangements may be made to register all the educated employment seekers at the local employment exchanges. Special arrangements may be made at all the employment exchange offices for this purpose and proper techniques and procedures for registering, interviewing, referral and placements may be developed. Simultaneously, Placement Bureaus may be set up in educational institutions for referral and placement of the educated unemployed.

6. Conclusion

To sum up, the problem of increasing unemployment in Pakistan is a product of (1) high population growth rate and (2) absence of an explicit policy aimed at employment generation in the country. The future employment prospects will depend on the economy's progress during the 7th Plan and beyond, particulary on the performance of industry, agriculture and construction sectors. It is also believed that human resource development can be instrumental in employment generation by promoting self-

employment anad small-scale industrial sector in Pakistan.

LESSONS OF WAPDA WATERSHED MANAGEMENT PROJECT

A Study in Cost-Benefit Analysis[1]

BY

Salman Ahmad*

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1. Introduction

WAPDA's Watershed Management is a plan for reducing the sediment load of the River Jhelum at Mangla and Raver Indus at Tarbela so far as this can be achieved within Pakistan and Azad Kashmir.

The reduction of river sediment loads is inseperable from soil and water conservation throughout the river catchment and these in turn cannot be divorced from land use in its widset aspects.

Erosion can be defined as the lowering of the land surface by weathering, corrosion and transportation under the influence of gravity, glaciers, wind and running water. It is essentially a geological process which leads to the deposition of new geological formation. The rate at which erosion proceeds is controlled by several factors, namely, the density of the vegetative cover, which provides a protective cloak

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to the land surface, the lithology (a soft friable sandstone will disintegrate more rapidly than a massive, though gravite), the structural attitude of the rock formation (the uplifted edge of a rock formation exposes more planes iof weakness than a flat-lying formation), the topography of the area (mountain ranges are normally associated with active erosion while low-lying plains tend to be areas of deposition) and lastly, the climate which controls the intensity of the erosion agents, wind, water, ice and the lateration of frost and thaw.

With so-called accelerated erosion, on te other hand, the essential agent is man. Human avtivity has had a profound effect uppon the vegetation of the area, even at quite high altitudes, in most cases rendering it less effective as a soil cover than it was in its natural state. The forests, in particular, have taken terrible punishment and really good protective forests now cover less than one-hundredth of the total area.

The rapid denudation of the mounatins has been a cause of serious concern since the cration of Pakistan in 1947. In fact, concern for deforestation and its possible relation to increased intensity and frequency of floods has been an issue since the 19th century, hwn forest policy for pre-partition India was formulated by the British rulers.

After the creation of Pakistan, the management of watersheds assumed a new urgency. Pakistan depends heavily on canal irrigation for its agriculture. But the flow of its rivers is seasonal. During summer, the period of maximum rainfall, there is so much water in the rivers that floods occur. During winter,

the period of minimum rainfall, the water in the rivers is insuficient to meet irrigation demand. For irrigation as well as power generation, it is essential to store surplus water in summer so that it can be used in winter. for this purpose, two large water storage reservoirs have been constructed - one at Mangla and the other at Terbela.

The rate of siltation of these reservoirs is high. The foresters remedy to the problem of accelerated siltation of water torage reservoirs is the reforestation of their watersheds. The need for such reforestation is recognised generally, even though engineers point out that a considerable part of the silt load of the Indus River results from scouring by glacier action, which will nnt be reduced by tree planting on watersheds. In any case, the engineers add, they can build another reservoir when the first silts up. The foresters reply that the number of dam sites is limited. The debate goes on. All admit, however, that increasing the vegetation cover on the watersheds would reduce soil erosion from the mountains and therefore, less sediment would be deposited in waterways and water storage reservoirs. The actual sediment quantities involved are in question, as well as wheter the reduction would be significant enough to increase materially the useful lifde of the reservoirs. Another question is: would benefits of the reforstation program be commensurate with its costs?

A major difficulty with such a programme is its full implementation. A significant reduction in the amount of siltation may require tht a large part or all of its vast watershed be treated. A large number of

people inhabit it, and they and their livestock cannot be displaced from heir lands.

2. The Project and Its Objectives :

The current approach to watershed management -- motivating the mountain farmer -- dates back to 1959 when the Water and Power Development Authority (WAPDA), started its Mangla Watershed Project. At preset, a number of agencies are active in this field including WAPDA, forest Department, Directorate of Soil and Water Conservation, Punjab and the Kohistan Development Authority.

In the North West Frontier Province (NWFP), the Waterwhed management Project was initiated in Kaghan in 1965 and in Ghalis in 1968. In 1970-71, a pilot project was started in the Kaghan and Daur Velleys with assistance of the World Food Programme (NWFP). This pilot project was completed in 1976. then the expanded project 385-Forest Extension and Watershed Management in NWFP (1976-82) was approved.

At present a 15-year Perspective plan is envisaged. The present study is concerned with the Phase-I of the 2451 -- Tarbela and Mangla Watershed Management Project (1983/84 to 1987/88). It covers an area of 7,000 sq.miles with a population of 3.1886 million (1981 census) located in Hazara and Malakand Civil Division (Abbotabad, Mansehra, Kohistan and Swat Districts).

The prime objectives of the project are to reduce siltation in Tarbela and Mangla reservoir, to control the incidence of flash floods besides the regulation of discharge in rivers and to improve the socio-economic conditions of the population residing in the catchment areas through:

(a) rationalization of present pattern of bad land-use;

(b) increase of forest wealth in the catchment areas;

(c) generation of job opportunities to locals and affectees of Tarbela Dam thereby to encourage then to adopt a mode of life which does not jeopardize the estimated life of Tarbela reservoir.

These objectives will be achieved throught the assistance of the World Food Programme which have already approved commodity assistance to the tune of 19.946 million mandays for the proposed project in the meeting of CFA, Rome of October, 1982. A major part of the expenditure of project will thus be met by NWFP by supplying food comodities for humsn consumption in lieu of the development workds done by the participating farmers on the approved activities. The philosophy of such an assistance is that the local beneficiaries should be encouraged and motivated to undertake the improvement workds on their own lands by providing them the incentive of food for work. Such works are much beneficial to the workers themselves and to the nation at large. The main targets are:

Afforestation	180,000 acres.
Soil and Water Conservation in cultivated fields	10,000 " " "
Pasture management	5,000 " " "
Stabilization of bad lands	5,500 " " "

3. Cost-benefit Analysis

In a conservation programme, it is often very difficult to quantify the costs and benefits of each consservation aspect separately. However, the costs estimates are comparatively more easier to compile than the benefits which are usually interlinked with all inputs and generally fall into intangible benefits.

Let us take the costs first.

(a) Costs of afforestation

In our project, the tree species found suitable in afforestation programme are chirpine and Eucalyptus. It is estimated that on the average 100 sapling per acre will be planted. The average cost works out to be Rs. 350/- per acre. This includes the costs of planting stock, digging of pits, transportation and the actual planting of sapling of saplings including their maintenance during the first year.

The afforestation sites will also require construction of check dams, diversion ditches, etc. on the drainage and above the land slides.

The cost of these anti-erosion works is Rs. 150/- per acre.

The total cost for aforestation and proper soil conservation therefore works out to Rs. 500/- per acre.

(b) **Cost of Engineering Works**

The engineeing costs of a watershed management programme depend upon the anti-erosion structures required to supplement the measures of land-use correction in a given catchment. The number and size of each structure may vary from place to place depending upon the degree of effectiveness aimed at in the programme. To determine the actual number of engineering structures and their sizes respectively which vary considerably from one area to another is a much more difficult job. Nowhere in the ongoing watershed management projects these costs have been qualified on the basis of either the catchment areas or land capability classification. The total costs estimated will amount to Rs. 1353.3 million.

(c) **The administration cost**

The total salary costs for both the headquarters and the resident staff in a catchment area including usual allowance and a special project allowance of 30% basic pay workout to about Rs. 4.89 million per annum.

The total capital costs of establishing the project including the costs of buildings both for the offices and residences of the headquarter and the field staff including the vehicles, trucks and tractors is estimated at Rs. 13.02 million.

The expected annual expenditure for administering the project including running costs of vehicles and depreciation of vehicles and buildings is given as below:

	(Rs.000)
Salaries of staff:	4,890
Running cost:	0.650
Depreciation:	1.017
Total:	6,557

The benefits of the project are considered as below:

1). Reduction in reservoir siltation

In June, 1977 the estimated cost of the reservoir stood at Rs. 9,996 m. The planned reservoir storage was 9.3 million acre feet (MAF). Therefore, the cost of creating one are feet of storage is about Rs 1000/- The estimated annual reduction in sediment load resulting from watershed management programme with catchment area is 38,407 acre feet. Therefore, the annual benefit from the programme is Rs. 38.4 m. The rate of increase in benefits will depend upon the present rate of erosion and the

proposed speed at which the watershed management programme will be located. So the benefits included in the analysis is Rs. 40m.

2). Improvement in Agriculture

The benefits from improvement in agriculture are of two types, the benefits occuring from soil conserve measures and those which arise as a result of other measures of improvement.

The total cultivated area to be benefitted includes the maize and wheat crops. It is assumed that a net increase in output of 50% in case of both the crops should be possible. The net value of increased output is Rs. 133.99 m.

We may here point out that in calculating the above benefits, costs involved in increasing the yield like seeds and fertilizers was not explicitly taken into account. We assume a basic Rs. 50/- per acre as cost, taking into the account that the value of seed has already been deducted from crop output. We have not assumed very large increases in costs since most of the benefits we have assumed are obtianed either from relatively simple and inexpensive cultural changes (e.g. fewer ploughings) or from the construction of check dams and spill ways, etc. The cost of these will in the last resort have to be paid for by the cultivators but in this analysis these costs are included under the engineering costs. The calculated total present farm costs are Rs. 361/- lakh. The calculated future farm costs will be Rs. 429/- lakh, giving a net increase

of Rs. 68 laakh. The true agricultural benefit is therefore the icrease in value of output of Rs. 133.99 m. less the increase in farm costs of Rs. 68m. or Rs. 127.19 m.

3). Benefits of Livestock Regulation

The present population of livestock is much in excess than the locally forage resources. Therefore, the reduction of present livestock population is an essential measure of watershed management programme. The recommendations affecting the livestock numbers are the withdrawal of steep cultivation from agriculture, reforestation of steep grass lands, regulation of grazing in alpine and other pasture lands.

The effect of such a reduction on the value of output must be considered. This effect will be two-fold; on the one hand, the number of animals will decrease, on the other the yeild of the animals remaining will increase as a result of better feeding and a higher standard of management. The present number and value of output are as follow:

	Number (000)	Ouput (Rs. 000)
Bovines	509.4	30,298.4
Sheep	118.4	1,042.6
Goats	170.6	2,792.4

We assume that in the future goats will be completely eliminated as these are harmful to plants while the number of sheep will rise slowly to 150,000 head and that the number of bovines will fall by fall. We assume that the yield from the remaining animals will increase by 50% thus resulting in a net change i the value of livestock production from the present Rs. 341.33 lakh to Rs. 247.41 lakh, a reduction of Rs. 93.92 lakh, or 27%.[2]

4). Benefits of Water flow Regulation

The proposed conservation measures included in the watershed management programme are intended primarily to increase water intake into the ground to recharge the sub-soil water storatge. Similarly the measures which check the run-off and improve the surface tillage and vegetative cover will also produce similar resutls. Besides, improving he local water supply in the spring and wells, it is expected that the water yield from the area should be more sustained and regualted in a manner that the discharges during the lean periods are enhanced.

The improvement measures will bring additional areas under the vegetative cover by extending the area under the forests, agricultural crops and grasslands. This means that the local consumption use should increase and run-off component should decrease. It is exactly the way the proposed conservation programme is aimed at. The total annual

regulation towards the lean period flows workout to 239, 700 acre feet. It will be rather safe to assume that at least 50,000 acre feet will be reachig the lake of Tarbela Dam. The cost of creating one acre foot of storage in Tarbela Dam was Rs. 1000/-. Therefore, the net annual benefits from water flow regulation will be Rs. 50m.

5). Benefits of Afforestation

The area to be afforested worksout to 180,000 acres. AT present the government commercial forests in the catchment is capable of producing 8-10 cubic feet of timber per acre per annum on sustained basis. However, due to the programme, the annual potential for the ara is expected to be 25 cubic feet per acre.

Assuming the price of timber at Rs. 30/- per acre feet and per acre average timber production at 6 cubic feet, the output works out to Rs. 180/- per acre. The total value comes out to Rs. 5 m.

The net annual income from the forests workout to Rs. 77.3 m. The present value of forests out-turn at Rs. 29m. should be deducted to workout the net increase in benefits with the implementation of watershed managment programme. the net annual increase is Rs. 48.3m.

The benefit-cost ratio as given in OFFICIAL ESTIMATE is reproduced along with our own adjustment:

benefits (Rs.m.)		adjusted
Agriculture	134.0	127.19
Forestry	48.3	48.30
Reduced Siltation	40.0	40.00
water-flow Regulation	50.00	50.00
Livestock Regulation	---	-93.92
Total	272.3	171.57

Costs (Rs. m.)	
Forestry anad engineering work	85.9
Watershed Management Authority	6.6
Total:	92.5

The benefit - cost ratio is : $\frac{272.3}{92.5} = 2.9$

our adjusted rataio is: $\frac{171.57}{92.5} = 1.85$

6). Economic Feasibility Analysis

The official cost-benefit aanalysis seems to be quite faulty. No mention has been made of the present value, the discount rate or the period of analysis. We have revised the cost-benefit calculations to correct these shortcomings. The life of the project over which the benefits will

occur is taken as 50 years and the discount rate is takne as 12% in order to calculate the present valaue. This rate is recommended by the Govt. of Pakistan far all the project other than industry.

A potential benefit-cost analysis here has been carried out on the assumption of future income from forest products. The real costs are the capital and recurring expenditures on the project. The opportunity costs are reduction in grass production on grazing lands from the sixteenth year of planting forest trees; and reduction in agricultural crops from cropland planted, from te eleventh year of such planting.

Costs

I. Capital Costs

Year in which incurred	Amount (Rs.m.)	Present value as of Mid - 1983.
1983-84	90.785	81.058
1984-85	94.528	75.338
1985-86	143.198	101.957
1986-87	143.997	91.582
1987-88	55.155	31.273
Total :	527.663	381.208

II. Recurring Costs. (Rs. in m.)

Cost of protection incurred annually from year 6 to year 50.	11.35	55.73

III. Opportunity Costs

Estimated value of annual reduction of grass production from year 16 to year 50 in the 180,00 acres planated to forest trees (estimated reduction about 1,200 lbs per acre air dry,		
valued at s. 50 per 100 lbs)	108.00	283.068
Total Costs: (I + II + III)		720.006

Projected Benefits

Benefits from Agriculture, Forestry, Reduced Siltation, Water-flow Regulation less Livestock Regulation after completion of the project		
from year 6 to year 50.	171.57	842.409

Total Benefits : Rs. 842.409 m.

Total Costs: Rs. 720.006 m.

Net Benefits : Rs. 122.403 m.

Benefit cost ratio : 1.17

5). Conclusion

Since the Forest policy of conserving soil and vegetation in the guzaras through enforcing legal restriction was not successful, the Watershed Management Project was started to find out if education and incentives would succeed better. Experience has shown that it would provided the constraints on the implementation of the project are removed.

The most important constraint is the transitory nature of the project. At present, it is being implemented as a five-year scheme. This means that after five years, there would be no watchers to protect the newly planted trees. since few guzara owners would be able to protect their planted areas themselves, it is essential to retain some control over the areas themselves, it is essential to retain some control over the areas to ensure that the planted trees are not browsed and trampled and cut prematurely. Perhaps the correct approach would be to increase progressively the size of the best of the watchers as the trees grow older rather than withdrawing them altogether.

Forestry is only small segment of the world of the mountain farmer. He also possesses cultivated land and livestock and hires out his labour whenever he can. since the prerequisite for conserving soil and vegetataion in the mountains is the improvement of the socioeconoic conditions of the mountain farmer, it is as important to improve the standard of agriculture and animal husbandry in the area as it is to reforest the nonwooded tracts. Unless the income of the farmer

could be increased from all possible sources he would be forced to continue to cut trees for sale illegally. Moreover, increased production from farmland would also result in increased availability of fodder and of crop residues which could be burnt as domestic fuel. This would decrease the pressure of grazing on mountain land and the incidence of tree cutting in wooded areas. Thus, the most important innovation needed development of all the resources of the mountains rather than of forestry alone.

Interlinked with the reforestation of nonwooded guzaras is the management of wooded guzaras and of scattered trees. The latter is sought throught he enforcement of restriction on cutting of trees and the former through persuation and incentives. Such restrictiions are considered high-handed and ultra-conservative by the guzara owners. Moreover, they at best only discourage cutting of trees. Their regeneration is neither ensured nor their lopping reduced. The management of guzaras and of scattered trees can be used as a powerful incentive for the reforestation of nonwooded guzaras. Many times the owner of wooded guzaras and scattered trees would also possess a sizable area of nonwooded guzaras, and his attitudes towards the planting of the latter may be influenced by his perception of the management of the former by the Forest Department.

Notes

1. *This study is based on WAPDA's Tarbela and Mangla Watershed Management Project (1983-84 to 1987-88). This is Phase-I of 15 - year Plan.*

2. *WAPDA, Mangla Watershed Management Study, Vol.I 1961, P. 97. While the official estimate has considered the net benefits from this head to be zero, a reduction is more realistic in our opinion.*

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CULTURAL ASPECTS OF PLANNING IN PAKISTAN

BY

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1. Introduction :

What is the relationship between culture and development? Until recently, development was viewed as a function of Economic factors, the cultural element figured only casually. "Development has hitherto been seen in exclusively economic terms. Our blueprints for society have often overlooked the cultural dimension; that dimension must now be incorporated into our plans so as to put an end to the mal-development born of the slavish imitation of alien models. (Sylla, 1982) It is now generally accepted that cultural progress is an integral part of overall development and a necessary condition for it.

Cultural development has hitherto been given only a peripheral importance in the development plans of Pakistan. Pakistan has, until now, implemented six medium term plans covering a period of 30 years and is in the process of embarking upon its Seventh Five Year Plan (1988-93). It was however the Sixth Plan document which for the first time devoted a separate, independent chapter titled "Cultural Development"

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and was rightly refferred to as 'the life-blood of the nation.". It is now generally agreed that planning process in Pakistan has largely failed in making any meaningful headway in this important field and that no worthwhile qualitative change is discernable. The main objective of this paper is to verify the veracity or otherwise of this opinion through a critical analysis of the general situation in the realm of culture prevailing in the country.

2. Scope of the Study :

Methodology and Data Sources

As the paper aims at analysing the general situation pertaining to culture prevailing in Pakistan, this can be done in historical perspective and in comparison with other countries which are culturally developed. The comparisons are also made with some developing muslim countries. The data is almost entirely based on secondary sources and published in national and international publications.

3. Study of the Cultural Scene in Pakistan :

Education

There is no denying the fact that culture develops a country and education is the best exponent of culture. Education has generally come to be regarded as a strong determinant of development. The expenditure on education is an act of investment both from economc and social points of view. Spending on education is however a long - gestation investment and

becomes fruitious only after a time-lag as opposed to investment in physical or financial capital whose results are more direct and quick.

Education scene in Pakistan is reviewed with reference to two criteria, namely the literacy rate criterion and primary school enrolment criterion. There is a cetain rate which is considered to be bare essential if any progress is purported to be made. Similarly, primary school enrolment as a percentage of total population must attain a minimum ceiling for any worthwhile development to take place. These criteria are based on a study of the economic history of the developed countries over the last century.

(a) Literacy Rate Criterion

Literacy rate and development are historically found to be positvely correlated. Despite a considerable debate about the causation, there is now substantial evidence that a 40% literacy rate may be regarded as a general threshold level for econmic development [Anderson, 1956] The distinction may also be made between "rudimentary" literacy Rate and "functional literacy" Rate. In rudimentary literacy rate, a person may be defined as literate if he can reply affirmatively to a simple question like : *can you read and write;* or as the ability to write one's name (Yardstick applied in Pakistan) or to write a short letter and to read the reply to it. [Unesco, 1961] The functional literacy, on the other hand, "implies the ability to read a newspaper in an hour or so, to follow a leaflet or a simple pamphlet.... to absorb a well-written manual for a technical appliance or a machine, in short, to make productive use of reading and writing. [Blaug, 1968]

The literacy rates compared underneath are the rudimentary literacy rates while from the viewpoint of economic efficiency, it is the functional literacy which is of greater importance.

The literacy rate in Pakistan, according to the last census (1981), stands at 26.2% and obviously does not fulfil the minimum requirement of 40% literacy rate considered as a threshold level for development. The table 1 below shows literacy rate of Pakistan in historical perspective.

Table 1

Literacy Rate In Historical Perspective

Kind	1951	1961	1972	1981	1988
All Pakistan	13.2	16.7	21.7	26.2	30.0.
Male	19.8	25.1	30.2	35.1	40.2
Female	5.3	6.7	11.6	16.0	18.3

Source : Economic Survey 1988/89, P. 123

As is clear from Table 1, the literacy rate barely doubled over the last three decades i.e. from 13.2% in 1951 to 26.2% in 1981. The shortfall (between actual and minimum required) would assume more menacing proportion if the more stringent yardstick of 'functional literacy' is applied. The literacy rate for females is even lower compared to the average for both sexes and shows a certain bias against the female education.

The literacy rate also compares unfavourably with many fellow muslim developing countries such as

Indonesia and Lebanon (61 - 71%), Jordan, Kwait, Malaysia, Syria and Turkey (51 - 60%), Iran, Libya (41 - 50%), and Algeria, Tunisia and Egypt (31 -41%), [Aslam and Zeynep, 1988] The planning process in Pakistan has largely failed in raising the literacy rate to any appreciable extent.

Although it is essential to increase the literacy rate to the minimum desirable base level, it cannot however cover all the related problems, particularly regarding the quality of education. It is thus argued that "the principal problem is not the low level of literacy but the imperfections of intellectuals." [Turhan, 1954] The rates of literacy in countries where Copernicus, Kepler, Galileo, Leipnitz, Newton, Descartes, Pascal lived were much lower than those of developing countries now-a-days. Hence the literacy rate must not be viewed in isolation but together with the factors of quality of education and the number of exports of various categories a country possesses.

(b) Primary School Enrolment Criterion :

As regards the second criterion of primary school enrolment, it is now generally believed that for progress of a country at least 10% of the total population must be enrolled in primary schools. [Peaslee, 1967] This ratio is about 7% for Pakistan as a whole and 2.1% for females compared to 12.06% for U.S.A. and 10.13% for Japan. Thus the average primary school enrolment does not fulfil the minimum requirement laid down for the rapid progress of a country.

Since child population varies considerably from country to country, the proportion of primary school students to the population of primary school age children is even more important. While this ratio is about 100% in the case of USA, W. Germany and Japan, it is about 75% in Pakistan (males 70%, females 43%). This compares unfavourably even with fellow muslim countries such as Iraq(100%), Indonesia (92%), Syria and Jordan (90%) and Turkey (83%). [SESRTRICI, 1981]

Primary education is important since it is the base on which the vast super-structure of education can be built. Planning in Pakistan has failed to appreciably increase the primary school enrolment while the world has gradually moved towards the idea of universal primary school enrolment. Primary school enrolment in case of females is even lower at 30% which once again confirms the implicit prejudice against female education.

The education sector as a whole has all along been a residual claimant of funds in the development plans of Pakistan. This is well borne out by the following Table 2.

The financial allocation for education on average in the First through Seventh plans has been estimated to be 4.6% of the total planned outlays. This ratio compares very poorly with similar ratios of other fellow muslim developing countries which have been more successful in combating illiteracy. This ratio was as high as 24.3% in Algeria, 22% in Morocco 15% in Tunisia, 10.6% in Egypt and 10.5% in Turkey. [SESRTRIC, 1981] It confirms that planners never

viewed education sector at par with the production sectors and investment in education was hardly considered crucial for the development process.

Table 2

Financial Allocations to Education in the Development Plans of Pakistan.

Development Plans ----->	First Plan 1955-60	Second Plan 1960-65	Third Plan 1965-70	Fourth Plan 1970-75	Fifth Plan 1975-80	Sixth Plan 1978-83	Seventh Plan 1988-93
Education & Training (% of Total)	6	4	5	7.6(1)	6.5(1)	6.0(2)	7

Note :-

1- Public Sector expenditure only.
2- Sixth Plan Achievment.

The expenditure on educataion as a percent of GNP also gives a general idea of the status and significance accorded to the sector within an overall policy framework. This ratio has oscillated around 1.9% of GNP in Pakistan compared to 7.9% in Algeria, 7.5% in Morocco, 5.2% in Tunisia, 5.1% in Egypt and 3.4% in Turkey.

To sum up, it can be safely said that expansion in education is a pre-requisite for development. "From the early workshop to the industrial revolution and from Meiji revolution to the first Soviet Five year plans, great economic movements have alwas been

accompanied by an expansin in education." [Unesco, 1972].

4. Research and Development (R & D) :

Raising the literacy rate and Primary School enrolment is a necessary but not sufficient condition of development. The quality of education imparted to a country's manpower also plays a crucial role in the development process. This is primarily determined by the level and status of R & D work undertaken in a country. "The scientist who can conduct research related to what his country really needs and the technician whose hands are as well educated as his head are basic to development. [Behrman, 1979]

Research and Developmennt includes fundamental research, applied research in such fields as agriculture, medicine, industrial chemistry etc. and experimental development work leading to new devices, products and processes. The criterion which distinguishes R & D from non- R & D activities is the presence or absence of an appreciable element of novelty or innovations." [Unesco, 1980]

The need for undertaking problem-oriented R & D work in developing countries like Pakistan arises due to the fact that only about 2% of all scientific research carried out in the Occident is said to have any relevance to their real needs and that too after suitable adaptations to local soil and climatic conditions." [Freeman and Young, 1965] The risks of cultural subversion and disintegration of the system of social relations through technology transfer are also

quite high. This underlines the need for evloving an appropriate technology for developing countries.

Research and Development (R & D) In Pakistan :

In the 1960's, it was estimated that to conduct a modest programme of research, a country needs to spend between 0.7 and 3.5 % of GNP on R & D and achieve a target of 4,000. scientists and engineers per million of inhabitants working or R & D. In the 1990's these targets obviously need upward adjustment.

The R & D status in Pakistan is reviewed with reference to these two criteria, namely, the R & D expenditure criterion and R & D manpower criterion.

(a) R & D Expenditure Criterion

According to this criterion, expenditure on R & D is taken either as a percentage of GNP or per capita expenditure or annual average expenditure per R & D scientist and engineer.

R & D expenditure as a percentage of GNP in Pakistan is 0.3% compared to 2.24% for developed countries and 0.43% for developing countries as a whole. This ratio is 4.6% in USSR, 2.7% in USA, 2.6% in Japan, 2.5% in Israel, 0.9% in Kuwait. It may be pointed out here that 1% is considered to be bare essential for development. Per capita expenditure on R & D in Pakistan is estimated to be $0.23 as against $216 in USA, $2.78 in Turkey, 2.07 in Egypt, $2.36 in Iraq and $1.14 in Algeria. Annual average expenditure per scientist and engineer in the case of Pakistan is

estimated to be around $2,500 compared to $100,000 in W. Germany, $81,000 in USA, $6,440 in Egypt, $ 16,889 in Iraq and $ 10,669 in Iran. [Unesco, 1987]

(b) R & D Manpower Criterion

According to this criterion, R & D manpower is compared to bring out the status of R & D in Pakistan.

The number of scientists and engineers and technicians per million of population in Pakistan is estimated to be 144 as against 3,956 in West Germany, 5,265 in Japan, 1,292 in Korea and 5,732 in Sweden. In fellow developing muslim countries, this figure stands at 221 in Turkey, 596 in Egypt, 181 in Indonesia and Malaysia.

The distribution of R & D scientists and engineers by field of science is also revealing. In the case of developed countries, approximately two-third of the total are engagaed in the fields of natural sciences, engineering and technology while in developing countries, largest number is concentrated in agriculture and this largely applies to Pakistan as well. (44.3%).

Moreover, in the developed countries about one-half to two-third R & D scientists and engineers are engaged in production sector while general services and higher education sectors together account for an overwhelming intake of R & D scientists and engineers in developing countries.

The comparisons made above have some obvious limitations. Firstly, the stage of development in the collection and compilation of R & D statistics varies from one country to the other. Secondly, the R & D concepts and practices adopted by individual countries are not specifically designed for purpose of international comparisons. The difference also exists with regard to the definition of an R & D activity and coverage of subjects. Thirdly, the up-to-date data are not available and this is particularly true of the time-series data. Lastly, the years taken are not usually the same, as the requisite R & D surveys are not simultaneously conducted by all the countries. Despite these limitations, the analysis undertaken above provides us with a broad anad aggregate picture o R & D in Pakistan.

5. Libraries and Books Production

Position of Libraries in Pakistan

The library statistics are scanty as no satisfactory analytical surveys have been conducted and the data concerning the different categories of libraries varies widely. The table 3 below gives some comparable figures for public and higher education libraries for Pakistan and other countries of the world.

As is clear from the table, the situation of libraries in Pakistan with regard to nos and volumes is indeed very pathetic. The interest in learning and libraries in developing countries was at its lowest ebb during their long period of subjugation and the West not only overtook them in this field but also created such a big gap that now seems very difficult to bridge

in the foreseeable future. Rare manuscripts and invaluable books were either eaten by worms or destroyed by vagaries of nature. The neglect has continued even after independence of these countries and retrieval measures are either not in sight or not at the scale required. The colonial powers also took away rare books, manuscripts and documents to their countries of origin and a short visit to the Western libraries and museums will suffice to give a fair idea of the enormons cultural plunder.

Table 3

Public and Higher Education Libraries

Countries	Public Libraries		Higher Education Libraries	
	NOS	Volumes	NOS	Volumes
Pakistan	3	86	N.A.	N.A.
Japan	1,028	97,172	893	131,499
West Jermany	13,806	75,660	145	66,778
Turkey	686	6,631	N.A.	N.A.
Egypt	223	1,329	163	2,755
Iran	385	2,161	198	3,993

Source : Unesco Statistical Yearbook, 1968, 1987.

BOOKS

Books adorn libraries and also serve as a cultural ambassadors for countries concerned. A Unesco document for the world congress on books stated that while books represent less than half of one

pecent of world trade in money terms, their influence as purveyors of ideas is immense.

The position of books in developing countries is however far from satisfactory. Asia with more than half the world's population produced only 1% of all the titles published world-wide and the Arab States produced only about 0.9% of the World's books while they accounted for 4.8% of the world population.

Pakistan too is deficient in book production. According to some comparative statistics, Pakistan produced about 1600 titles compared to 76,976 produced in USA, 58,489 in W.Germany, 50981 in U.K., 6,695 in Turkey, 5,731 in Indonesia, 4,835 in Iran and 2,801 in Malaysia. (29) [Uncesco, 1987] Several factors such as the size and rate of literacy influence the number of books published in a country. Subject-wise, the highest number of books published in Pakistan related to the field of religion (535), followed by literature (354), social sciences (194) and geography history. (180). The important fields such as philosophy, pure and applied sciences and arts were conspicuous for minimal activity. In the developed countries, on the other hand, book production is largely concentrated in social sciences, applied sciences, pure sciences, philosophy and art. These fields, together accounted for 30% of the total production in America while only 2,086 books out of 76,976 were published on religion.

Conclusion

Until recently, planners have remained preoccupied with 'growth' and that too of a specific

brand which mainly focussed on raising production and consumption in the present. The 'long-term planning horizon' was largely missed. The cultural aspects of planning were also completely overlooked in the earlier plans. In the recent plans, although there was a greater emphasis on cultural development but it has not gone beyond lip-service. The concern expressed for pathetic conditions of education, research and development (R & D) and promotion of learning has not found reflection in the specific policy actions as well as financial allocations. The sector, by and large, remains a residual claimant of development outlays. The planners and policy-makers seem to be confronted with a 'policy paradox'. They are fully aware of the vital importance of the cultural factors in over-all development of the economy but they seem helpless in allocating matching finances for the sector under pressure of the competing demands of the productive and infra-structural sectors. Any improvement in the cultural scene is thus largely dependent on the resolution of this paradox.

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COMPARISON OF DOMESTIC RESOURCE COST AND EFFECTIVE RATE OF PROTECTION MEASURES IN THE INDUSTRIAL RANKING

BY

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In a developing economy a large project in any one industry is bound to have direct and indirect effects on other sectors, both in terms of derived input demand from other industries or primary factors of production and in terms of the increased supply of the new commodity or service produced. These indirect effects can be far reaching and their exclusion from the analysis may result in gross over - or undervaluation of the project itself. A closely related problem is the correct pricing of the primary factors of production, labour, capital and foreign exchange. In a world of trade restrictions and distorted foreign exchange rates, considerable effort is being spent on devising frameworks which should be analytically satisfactory and at the same time practically useful for the measurement of the opportunity cost of producing or saving foreign exchange as well as for the measurement of economic costs of various restrictive systems. Two seemingly unrelated schools have developed in this field, that of domestic resource cost (DRC) and that of effective protective rate (EPR) measurement, but although they have been develped

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independently they turn out to be very closely related with each other.

The concept of DRC relates to a measure of real opportunity cost in terms of total domestic resources of producing or saving a net marginal unit of foreign exchange. For a given commodity, this would equal the sum of direct and indirect domestic resource costs incurred in domestic production divided by the difference between the foreign price of the product and the foreign exchange cost of direct and indirect imported inputs. Denoting elements of the matrix of direct and indirect domestic (W) and imported (N) input requirements by (r_{ji}), the direct plus indirect cost of a dollar earned or saved by the domestic production of the commodity i (for short, the B-measure) can be expressed as:

$$B_i = \frac{\Sigma_j W_j r_{ji}}{P_i - \Sigma_j N_j r_{ji}}$$

The B-measure, by comparing it with some measure of the economy's "real" or "accounting" exchange rate, can be used as an investment criterion, just as the internal rate of return of a project is compared with some measure of the real rate of interest. According to Bruno, (1967) "the concept bears a close relationship with basic international trade considerations of comparative advantage". One advantage of using DRC in practice, however, comes from the fact that in many projects export proceeds or import savings loom large in the computations and often it is the exchange rate which is the most

distorted price. There is thus some advantage in comparing DRC with an approximate accounting rate rather than have an arbitrary level of the latter distort the rate of profit calculations.

The concept of EPR, which is apparently an independent development, owes its main impetus to the attempt by trade theorists to devise improved measures of the impact of commercial policy on world trade and of the implicit protection of value added in the presence of traded imputs. It equals the excess of the remuneration of domestic factors of production (domestic value added), obtainable by reason of the imposition of tariffs and otherr trade barriers, as a percentage of value added in a free trade situation. Tariffs on the product itself raise the EPR, while duties on inputs have the opposite effect. If input coefficients are constant in the relevant range and domestic prices equal the world market price plus the tariff, Bela Balassa and Schydlowosky (1968) measures EPR on commodity i as follows:

$$Z_i = \frac{W_i - V_i}{V_i}$$

Z is EPR and W and V are the value added in the country in question and in a free trade situation.

For the sake of comparability with DRC, the B - measure can be re-interpreted by expressing foreign values in terms of domestic currency (i.e. multiplying the denominator by the exchange rate). It can then be shown that the B-measure equals unity plus a weighted average of the effective rate of protection at

different levels of fabrication - the weights being the contribution of direct and indirect value added to output produced under free trade considitions.

$$B_i = 1 + \Sigma_j Z_j \frac{V_j r_{ji}}{V_j r_{ji}}$$

Bela Balassa and Schydlowsky have then compared this B-measure with EPR by giving a numerical example of clothing and precision equipment. The conclusion is while the EPR indicates the relative performance of processing activities, the B-measure (DRC) is affected by inefficiencies in the manufacturing of the product itself as well as in the production of its inputs and this influences the choice among final products. "These considerations point to the superiority of EPR over that of the DRC in evaluating the desirability of individual industries. Accordingly, we have to reject Bruno's claim that this ranks industries according to their comparative aadvantage". (1968; pp 348-60)

Bela Balassa and Associates (1971) applied the technique of EPR for evaluation of industrial sector in many less developed countries. The system of protection in Pakistan during 1960-67 was also analysed. The protective system in Pakistani manufacturing was based on an appraisal of the licensing system, export bonuses, and other factors which kept tariffs from being the sole, or even the principal, determinant of the difference between domestic and world market prices. Introducing direct price comparisons for inputs and for output increased

the average level of protection in most cases, although in industries where the process of import substitution had been completed and exports had begun under the export bonus schemes, domestic price fell below the tariff inclusive C.I.F. import price estimated at the official exchange rate. The major conclusions derived from the results of their study in Pakistan are the follwing:

1. In the presence of import licensing or quantitative restrictions, tariffs are a poor guide to the relative price structure.

2. The raanking of industry by nominal implicit protection, defined as the percentage difference between domestic nd world market prices, differs considerably from EPR.

3. The EPR to export industries in the manufacturing sector is very high.

4. The distortions in domestic relative prices introduced by Bonus Voucher scheme can become so severe as to make processes of production privately profitable in the country when they would not be adopted by a firm facing world market prices.

5. There is a considerable degree of discrimination in favour of manufacturing goods and against agriculture.

6. Manufacturing, food processing and consumer durables are the most highly protected, followed

by intermediate products at higher levels of fabrication and beverage, and tobacco. The ranking among the remaining industry groups is dependent on the choice of the input coeffficients.

The high EPR in export industries due to Bonus voucher scheme led to the concept of "Effective Taxation of Exports" which is the mirror image of EPR. This was employed by Pakistan Planning commision during Third Five Year Plan (1965-70). The equation is:

$$T_i = \frac{{}_xW_i - {}_xV_i}{{}_hV_i}$$

It says that effective taxation is the difference between value added if the product were sold on world markets free of domestic taxation and all traded inputs were bought at world prices, and value added gained from export sales under actual ocnditions with respect to taxation and input purchases, this difference being expressed as a percentage of value added on home sales. So, the same EPR equation, with appropriate redefinition of the underlying variables, can be used to analyse the actual effective taxation or subsidization when some or all the export incentive measures are taken into consideration.

The EPR measure of industrial ranking has been used widely in LDCs' for industrial strategy planning. Compared to it, DRC was extensively used only in one country, Israel, where it was applied by government planners since the early 1950's as a means

of project evaluation. DRC can be rationalized analytically in an input-output or linear programming general equilibrium framework. It can be applied as a systematic ex-post measure of the cost of a restrictive trade system. This cost equals the savings in domestic resources that can be obtained by expanding relatively efficient export industries and contracting relataively inefficient import-substituting activities.

The EPR measure will be identical with DRC only in the exceptional case in which all goods are traded, there is perfect competition in the domestic factor market, and all prices reflect marginal rates of transformation among goods. We know, that, in addition to tariffs, there may be quantitative restrictioins on trade, and there is a problem with non-tradables, and that factor prices may not reflect opportunity cost. The early studies on EPR have not tried to measure the effects of these additional factors other than that factor which is directly measurable from observeed tariffs. However, the more recent empirical studies on LDCs' have ventured beyond the confines for narrower EPR concept and incorporated import-domestic price relatives instead of tariff rates to take account of the effect of quantitative restrictions.

The best way of comparing DRC and EPR is to look at what is probably its fullest analytical exposition, namely, Corden's (1971). His formulation concentrated on the measurement of protection by means of the observable effective tariff. Denoting tradable input co-efficients by a_{ij} and the tariff rate on commodity i by t_i, we have $EPRg_j$ on commodity j:

$$g_i = \frac{t_j - \Sigma_i a_{ij} t_i}{1 - R_i a_{ij}}$$

This can be turned into the dimensions of effective exchagne rate (on value-added) by adding 1 to g_j and by noting that $1+g_j$ is equal to the ratio of domestic (protected) value aadded to the international free trade value added, where both are measured at a unit foreign exchange. Corden (1971) has analysed this concept of EPR very critically. The main points of criticism are as follows:

1. Fixed coefficients assumption is unrealistic. Since production function can differ between countries this assumption does not mean that the relevant input-coefficient must be the same as in foreign countries. Moreover there is a problem of substitution. Once substitution between primary factors and tradable inputs is allowed, the EPR concept loses much of its appeal. In particular, one of its original objectives, the ability to predict actual resource pulls, can no longer be achieved unless some very restricitve assumptions are made.

2. The treatment of input of Capital. Corden (1971) states that, in the case in which part of the capital stock is tradable, "only the annual service of tradable capital goods can be treated as an input, and only when it is legitimate to assume in addition a perfectly elastic supply of capital fund". The idea is to divide capital between traded and non-traded inputs and allocate the costs to the corresponding items in

the numerator and denominator of the exchagne rate calculations.

Bruno (1967) has made Corden's (1971) analysis of EPR as a basis of his attack. According to him the problems connected with the treatment of capital input and distortions in the cost of traded capital are fully tackled within DRC calculations. DRC was originally conceived as a normative ex-antemeasure of social comparative advantage. That role has never seriously been claimed by the ex-post EPR measure. Next, the past use of DRC as an ex-post measure of the cost of protection, though in itself positive iin content, does also have normative undertones. The emphasis is on measuring social opportunity cost. In the case of EPR, this point is not entirely clear.

Once one imposes all of Corden's theoretical considerations on top of the basic semipleminded EPR, it would appear that one would come out with a concept of EPR that is extremely close, if not theoretically identical, to DRC. The difference between the two approaches may be in the point of departure for the measurement of total domestic value added in the numerator of both EPR and DRC measures. Whereas DRC attempts to measure by full input-output analysis the direct and indirect input of primary factors and imputes prices (shadow or marrkt) to these factors n order to obtain an opportunity cost measure of value added, the EPR approach obtains this measure of value added as the difference between the corrected final output and corrected total tradable input. If these corrections are made correctly the two approaches would yield the same results.

From an analytical point of view, it would seem that the concept of EPR and that of DRC are closely rrelated, if not identical, in measuring the ex-post cost of protection. The ranking process of industries by their levels of EPR and DRC is equivalent to ranking them by the degree of their current competitiveness in world marktes. Countries wishing to rationalize their protective and development policies should change tariffs and other policies so as to discourage the industries with high levels of EPR or DRC than those with low levels. In the extreme, industries which are operating under the handicap of negative protection and which are still competitive deserve the greatest encouragement to develop their comparative advantage. It is not a question of which approach is superior or inferior. The use and application of EPR or DRC depends on which policy objective and goal is in view. In practice, the advantage of one or the other method of measurement would depend on the protective system under which it is going to formulate the industrial strategy.

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GROWTH POTENTIAL OF RURAL SMALL INDUSTRIES IN PAKISTAN

BY

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1. Introduction

There is sudden resurgence of interest in the rural small industries as a source of higher earnings and employment in Pakistan. This seems to be based on the statistical evidence which shows emergence and growth of fairly large sized rural small-scale industrial sector, employing a large number of rural labour force. The past growth of this sector is attributable to a number of factors including overall development strategy, institutional factors, traditions, etc. What is noteworthy in this case is the entrepreneurial dynamism which flourished despite the absence of direct support of econimic policy as it was geared to the development of large-scale sector only. (Aftab, 1988).

An important question to be asked now is : what growth potential does Pakistan's rural small-scale sector has? This paper attempts to answer this question.

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2. The Growth Determinants

The study of sources of past industrial growth in Pakistan indicates that the future growth of rural small-scale industry would largely depend on the following set of factors :

(1) Extent of agriculture - industry linkages.

(2) Development of infrastructural facilities in the country.

(3) Institutional support of RSIP.

(4) Skills development for rural labour market.

(5) Export orientation of RSIP.

Extent of Agriculture - Industry Linkage

As observed above, rural small manufacturing activity in Pakistan has a strong agricultural base. Agriculture and industry are bound by strong demand and supply links. Since agriculture and industry are related in forward and backward linkages, the development of one can be expected to lead to similar change in the other.

From RSIP growth viewpoint, of foremost importance is the level of agricultural income. Incraeased agricultural income, if spent on the RSIP products, would naturally promote the development of this sectr. But what has not yet been documented in this regard are: (1) what type of RSIP goods are in

demand?; (2) what changes take place in it at various income level; and (3) what factors (i.e. other than income) cause these chages? It goes without saying that demand-side analysis of RSIP would depend on the above mentioned questions.

Thus there is urgent need to collect reliable and detailed informataion on the nature and pattern of demand for the products of RSIP. Such information will be extremely useful in : (1) indicating changes in demand pattern linked with increased agricultural income; (2) identifying industries / sector with future growth potential; and (3) long-term industrial planning.

Infrastructural Facilities

The development of Pakstan's rural economy is heavily dependent on better infrastructural facilites. This is evident from the strong trade and transport links between villages and urban centres. It appears that these links are essential for promoting rural industry. Since the market orientatioin of RSIP generally extends beyond the rural arreas, the future development of these industries calls for strong infrastructural support. So a strong case may be built on the basis of existing information for improvement and extension of electricity, roads, telephone, water supply, and sanitation facilities in the rural arreas. Further, it may be emphasised that the effect of infrastructural development as an instrument of development can be exploited under appropriate industrial development policies. Transport and electricity development could benefit rural industrialisation only in an atmosphere of rapid

growth. The extremely restricted effects of public works programmes in developing countries provide ample proof of this.

However, how far absence of infrastructural facilites actually hinder growth of RSIP needs detailed examaination. For example, it would be useful to determine the relative significance of various types of infrastructure for different categories of RSIP. Such information would be extremely helpful in future policy formulation.

Institutional Support

It may be emphasised that in Pakistan rural small industry does not have to be 'created' from a low base. It already exists on a farly wide scale. The task is to help it grow in desirable direction.

While it is impossible to deny the importance of institutional support for the development of RSIP, the real question is: how best it can be done? The point is that the present RSIP sector has certain 'limitations' despite being vigorous. RSIP are concentrated geographically, restricted to a few branches, and are reluctant to diversify into new products, or more into new branches.

Existing information (Aftab and Rahim, 1986)[2] suggests that majority of privately owned small rural units have developed with their own initiative. Public sector support is extended normally to larger urban units, and hardly trickles down to the really small. No official institution is yet granting RSIP loans on any

but trivial scale. Similarly, RSIP have hardly benefitted from vocational training facilities in the public sector. Government effort to bring skills to Small manufacturing units has been largely restricted to urban areas. Federal Government agencies like Leather Products Development Centre, and Provincial small Industries Training Centres have done useful job of skills diffusion, but rural manpower have not really benefitted from these. There are, however, exceptions like Punjab Small Industries Corporation's 'Dehi Mazdoor Training Programme' (PERI, 1985)[3] which seems to have reached the village level enrepreneurs. The need to multiply training centres with rural outreach for RSIP uplift can not be over emphasised.

Another major element in public assistance to RSIP are the Small Industrial Estates. These exist in all the four provices, though have not been equally successful everywhere. Evidence suggests uneven response of private investor to invest in thesee Estates even after long years of establishment. Moreover, direct impact of the Industrial Estate on the development of RSIP has not been properly assessed so far.

However, some of the public funded centres like Metal Industries Development Centre, Sialkot, Pak-German Wood Centre, Peshawar and Gujrat, Pak-Holland Metal Project, NWFP, have introduced new designs which are in use. Occasionally, the success of such centres also spills over to RSIP. But the successful contributions of public sector projects to growth of industries has been largely limited to big towns and large-scale industries.

Skills Development for Rural Labour Market

Pakistan's land-man ratio explains not only the low level of per capita income but also the fact that a large proportion of labour force is not fully utilized. Small farmers suffer from redundancy of labour force. Lack of education and training and absence of facilities for skill development adversely affect the quality of labour force, thus hindering the occupational and geographical mobility of labour. The situation is worsened by mechanisation of farming which creates seasonal gluts in the rural labour market.

Since the new employment opportunities are likely to arise in the rural industries, the skills development programme need to be tailored to the new job requirements. Thus greater efforts and resources will have be diverted to expand primary / secondary education, and adult education so that imparting of skills is facilitated. It is also essential to identify branches of technical education on the basis of rural labour market assessment so that appropriate training facilites may be provided. This would call for identification of streams in various branches of RSIP such as agricultural engineering, wood furnishing, metal working, leather working, etc., so that matching of demand and supply of new skills could be attempted.

In order to know the true supply position of manpower, surveys must establish at least the number, sex and education of those who enter labour market. Additional sources of supply such as immigration and local redundancies could also be taken into account. On the other hand, demand for rural manpower can be established by studying

available data, collecting new data on manpower demand through field survey and interpretation of information.

In this regard, diffusion of informatioin through public agencies like Employment Exchanges regarding changes in labour market could be of great importance. At present the Employment Exchanges are contented in publishing only quarterly reports of statistical information. This information will be of great use if details with particular reference to occupational and industrial trends in local employment exchagnes are made available. Moreover, Employment Exchange Services should develop a closer liason with technical training institutes, polytechniques and other vocational training centres.

The key to rural manpower development is to have well trained field staff, with means and incentive to act, both in collecting data and diffusion of information for implementing appropriate manpower development strategy.

Export Orientation of RSIP

The demand side growth constrainsts of rural small industries are of two types: (1) the products of rural small industries have only a limited market in view of the low average level of income; and (2) they are just able to cater to the lower end of the market consisting of inferior products. Hence people consume less of the products of rural small industries as their incomes rise.

One way to realise growth potential of RSIP is through exports. This can be possible if the RSIP realise their comparative advantage of export-oriented production by availing the export incentives. However, in real life, the RSIP seldom directly participate in export business. They lack in necessary production and organisational facilities to carry out export businceess themselves. Instead they flourish as subcontractors to the large exporters. Hence the export privilages are seldom utilized by them.

Provided that can be improved, there is considerable scope for expanding subcontracting system, and through it RSIP (at least in selected industries such as textile products, sports goods, light engineering, and others) for export promotion. From policy viewpoint, there does not seem to exist a case for adoption of export incentives for the RSIP. Insteasd the RSIP are likely to benefit more from the broad export oriented macro policies.

3. Conclusion

To conclude, Pakistan's rural small industrial sector now occupies an important position in the economy. Over the years, this sector has greatly expanded in terms of size and variety of productioin. The real sources of growth of RSIP were : (1) old industrial traditions; (2) strong agricultural base; (3) population concentration pattern; and (4) well developed transport anad trade sector. The furture growth of RSIP will mainly depend on ; (1) the extent of industry - agriculture linkages; (2) infrastructural facilites; (3) institutional support of RSIP; (4) development of labour market; and (5) export

orientation of this sector. Finally, it needs to be emphasised that the growth of small -scale industrial sector should be viewed as a part of the development process and, thus, not independent of other sectors of the economy, including the development of large - scale industrial sector.

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GRANT ELEMENT IN US AID TO PAKISTAN (1977-87)

BY

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1. Introduction

The policy of the Unites States in respect of Pakistan is but a part of its global and regional policy. Any major change in the region is bound to influence Pak-US relatins. The importance of Pakistan to the United States has varied with the geo-political requirement of the later. Before 1953 Pakistan did not figure prominently in the US policy. Its importance grew in the days of the cold war but declined again with the Sino-Indian conflagration and the onset of detant. As US-China relations improved, the importance of the then province of East Pakistan vanished and the United States colluded with other powers in letting the State of Bangladesh emerge. However, the Soviet move into Afghanistan marked a turning point in US strategy in this region. Once again Pakistan became the focus of US attention and received substantial economic and non-economic assistance. Has Pakistan really benefited from the US economic aid?** A high estimate of grant element is

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***This paper attemps to answer this question by calculating the grant element of the U.S. Aid in differ time periods.*

taken to indicate strong economic baragaining power of Pakistan, whereas a low grant element is considered as an index of unequal relationship between the two countries.

2. Methodology

The grant element is a measure of the degree of concession of a given loan and is computed in two stages. The first stage involves calculation of the equal annual instalments repayable on a loan and the second entails arriving at present values by using an appropriate discount rate. The grant element is thus the difference between the face value of the loan and the discounted sum of payments of interest and principal on the loan. It is affected by three variables viz:-

a). The interest rate.

b). The grace period.

c). The repayment period.

First, In order to compute grant element, annual intalments of interest and amortisation repayable on a loan are calculated. For simplicity it is assumed that :

i. debt servicing remains constant over time.

ii. interest is charged during the grace period but is paid out when the grace period ends.

iii. rate of interest remains the same during the grace repayment periods.

$$A = \frac{rq(1 + {}^{r}/_{100})^{n}(1 + {}^{P}/_{100})^{g}}{100(1 + {}^{r}/_{100})^{n} - 1}$$

where Q = is the amount of loaned principal.

P = is the rate of interest during the grace period.

g = is the grace period in years.

r = is the rate of interest on the loan.

n = is the repayment period of the loan.

A = is the equal annual instalments of debt servicing on loan.

Next the present value of debt servicing incurred on the loan is calculated by using the following formula :

Present value of

$$A = \left\{\frac{A}{{}^{i}/_{100}(1 + {}^{i}/_{100})^{g}}\right\} \left\{1 - \frac{1}{(1 + {}^{i}/_{100})^{n}}\right\}$$

where i = the discount rate (it is assumed to be 10%)

Finally, grant element is computed

$$GE = {}^{(Q - PV)}/_{Q} \times 100$$

whereGE = grant element.
Q = amount of principal loaned.
PV = present value of loan repayable over the entire period.

To obtain an accurate measure of the grant element in US aid to Pakistan for period 1977-87, it is imperative to discount the future changes on a loan by using an appropriate discount rate. The discount rate chosen in this case is 10%. Although arbitrarily chosen, this rate is a reasonable approximation of the opportunity cost involved if the country is to borrow at commerical rates in the international markets. The calculated rates of grant element of the US aid to Pakistan are presented in Table 1. It may be noted that for years 1972-78, 1980-81 and 1985-86 grant element could not be calculated as the economic surveys of Pakistan does not provide values of US aid to Pakistan for those years. The calculation included in Table 1 show that over this period (1977-87) the grant element in US aid to Pakistan at the given discount rate has been around 66%.

It may also be noted that the above estimates of the grant element in US aid flows to Pakistan do not take into acount the extra cost imposed by aid typing. This is so because of non-availability of data. In general, however, excluding consideration of the cost imposed on the recipient by aid typing would produce exaggerated estimate of the grant element in foreign aid inflows. It we accept an estimate of 15-20% which is the commonly quoted range of extra cost incurred on account of aid typing, the grant element of US aid flows would reduce significantly. Haq (1967), Alvi (1970), Hamid (1974) Alvi (1979)

Comparison

Two exercises of the similar nature have been carried out in the past. Mahmood (1977) calculated the grant element in foreign aid to Pakistan for period 1965-66 to 1974-75. At 10% discount rate, he found out that for most of the years the grant element of the US aid to Pakistan was in 66% - 69% range. Malik and Rizvi (1982) found inconsistent grant element in US aid to Pakistan at 10% discount rate for the period 1975/76 - 80/81, but did not attempt to explain it. However, a comparison between the results of Mahmood (1977) and this study is quite revealing.

Table 1

GRANT ELEMENT IN US AID TO PAKISTAN

Years	Volume of aid ($ million)	Grant Element (%)
1978-79	29	65.99
1979-80	111	65.99
1981-82	14	66.00
1982-83	67	65.98
1983-84	25	60.00
1984-85	843	65.98
1986-87	91	65.98

Note : For details see Appendix Tables A.1 to A.7

Source : Computed from data available from Economic Survey of Government of Pakistan 1987-88.

Table 2

Grant element in us aid to pakista (1965-75)

Years	Grant Element (%)
1965-66	69.7
1966-67	69.7
1967-68	67.58
1968-69	66.00
1969-70	66.00
1970-71	66.00
1971-72	87.8
1972-73	66.00
1973-74	66.00
1974-75	66.00

Source : Sèc Mahmood, 1987.

Mahmood's main findingis that for the period (1965-76) the grant element of US aid to Pakistan was around 66% at a10% discount rate.

Mahmood's main finding is taht for the period (1965-76) the grant element of US Aid to Pakistan was 66% at 10% discount rate. However, he does not explaon this particular trend. Our results also show a fairly consistant grant element of the US aid of around 66% for the period 1978/79 to 1986/87. How can we explain this long term trend?

Pakistan-US relations have ranged from close cooperation to conflict. The Pak-US alliance relationship of the 1950's, though imminently satisfactory in the short run, proved counter productive and disappointing for both in the long term. The grant element in the US economic aid to Pakistan during 50's got reduced from 100% in 1951-52 to 40% in 1988-89. The deterioration in Pakistan-US relations,

which began with US military aid to India in 1962, was greatly accelerated after the Indo-Pakistan war of 1965 and the subsequent warming of relations between Pakistan and China. Inspite of the estrangement in relations, grant element in US aid to Pakistan was around 66% [Mahmood, 1977].

For a brief period in the early 1970's it appeared that the trend might be reversed. But as the issue of unclear technology and human rights was added to the problematic areas of the Pakistan_US relationship, the two countries virtually became unfriendly. By 1979, Pakistan-US relations had reached their nadir. The American decision in April 1979 to cut off the already insignificant military and economic assistance. The Symington-Glener Agreement further convinced Pakistan of American bias. However, the Soviet move into Afghanistan marked a turning point in US strategy in general and toward Pakistan in particular, Responding to changing situations and changes in US public opinion, the US reversed its earlier policy towards Pakistan. Officials openly described Pakistan as a new "front line" State that needed support in face of Soviet aggressive designs in South West Asia. So in August 1981 came the announcement of the agreement of both governments to a 3.2 billion package of US economic and military assistance for six year period. Economic assistance amounted $1625 million. Inspite of all this nothing will be more misleading than to think that the present Pakitan-US relations are a revival of their past trends. The reason for this is that during the period 1977-87 the improved political ties have not generated improvements in economic relations between the two countries. This is evident from the fact that the grant element in the US

aid to Pakistan during 1977-87 has remained around 66%. If we compare our results with that of Mahmood (1977) - for the period: 1965-74 we find that in both studies the grant element in US aid to Pakistan has remainded around 66%. Thus there has been a static grant element in the US aid to Pakistan even when political relations between the two improved. In other words, Pakistan, despite closeness of intergovernmental relations with USA, was not able to obtain enhanced grant element in the US aid.

Thus it can be safely concluded that while US has benefitted from Pakistan's Strategic position during 1977-87, Pakistan has not been able to reap more economic gains from United States. This again illustrates the highly unequal relationship that exitsts between the two states and clearly demonstrated Washington's unrelenting endeavours to assert and impose its global supremacy on the one hand and Pakistan's weak economic and political position.

Conclusion

A counrty's ability to achieve economic self-reliance is closely linked to the degree of its political independence. Any contry which is excessively dependent on other countries for financing a substantial part of its development programmes cannot follow an independent foreign policy. Pakistan's ever-increasing dependence on the US during 1977-87 is another good example of economic and political dependence. Our estimate of grant element in the US aid to Pakistan during this period proves the same.

Not that aid in itself is bad, what matter is the quality and content of the aid, and where and how it is used. Pakitan's static grant element percentage clearly indicates that while US had benefitted from Pakistan's strategic position, Pakistan has been unable to obtain more grant from USA during 1977-87.

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Table A-1

GRANT ELEMENT
US AID LOAN 1978-79

AMOUNT OF LOAN $ 29 MILL
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
REPAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interst	Discounted Present Value
1	-	0.73	0.73	0.91	0.66
2	-	0.73	0.73	0.83	0.60
3	-	0.73	0.73	0.75	0.54
4	-	0.73	0.73	0.68	0.50
5	-	0.73	0.73	0.62	0.45
6	-	0.73	0.73	0.56	0.41
7	-	0.73	0.73	0.51	0.37
8	-	0.73	0.73	0.47	0.34
9	-	0.73	0.73	0.42	0.31
10	-	0.73	0.73	0.39	0.28
11	0.97	0.70	1.67	0.35	0.58
12	0.97	0.68	1.64	0.32	0.52
13	0.97	0.65	1.62	0.29	0.47
14	0.97	0.63	1.60	0.26	0.42
15	0.97	0.60	1.57	0.24	0.38
16	0.97	0.58	1.55	0.22	0.34
17	0.97	0.56	1.52	0.20	0.30
18	0.97	0.53	1.50	0.18	0.27
19	0.97	0.51	1.47	0.16	0.24
20	0.97	0.48	1.45	0.15	0.22
21	0.97	0.46	1.43	0.14	0.19
22	0.97	0.44	1.40	0.12	0.17
23	0.97	0.41	1.38	0.11	0.15
24	0.97	0.39	1.35	0.10	0.14

25	0.97	0.36	1.33	0.09	0.12
26	0.97	0.34	1.33	0.08	0.11
27	0.97	0.31	1.33	0.08	0.10
28	0.97	0.29	1.33	0.07	0.09
29	0.97	0.27	1.33	0.06	0.08
30	0.97	0.24	1.33	0.06	0.08
31	0.97	0.22	1.31	0.05	0.07
32	0.97	0.19	1.28	0.05	0.06
33	0.97	0.17	1.26	0.04	0.05
34	0.97	0.15	1.23	0.04	0.05
35	0.97	0.12	1.21	0.04	0.04
36	0.97	0.10	1.18	0.03	0.04
37	0.97	0.07	1.16	0.03	0.03
38	0.97	0.05	1.14	0.03	0.03
39	0.97	0.02	1.11	0.02	0.03
40	0.97	0.00	1.09	0.02	0.02
	29.00	17.76	48.33		9.86

= Amount Of Laon = Discounted Present Value = Grant Element.
= $ 29.00 = $ 9.86 = $ 19.14 65.99%

PRINCIPAL AMOUNT : 29.00
NO. OF YEARS : 30.00
INTEREST RATE : 0.025

Source : Computed from Data from Economic Survey of Pakistan 1986-87.

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Table A-2

GRANT ELEMENT
US AID LOAN 1979-80

AMOUNT OF LOAN $ 111 MILLION
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
PAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interest	Discounted Present Value
1	-	2.78	2.78	0.91	2.52
2	-	2.78	2.78	0.83	2.29
3	-	2.78	2.78	0.75	2.08
4	-	2.78	2.78	0.68	1.90
5	-	2.78	2.78	0.62	1.72
6	-	2.78	2.78	0.56	1.57
7	-	2.78	2.78	0.51	1.42
8	-	2.78	2.78	0.47	1.29
9	-	2.78	2.78	0.42	1.07
10	-	2.78	2.78	0.39	1.07
11	3.70	2.68	6.38	0.35	2.24
12	3.70	2.59	6.29	0.32	2.00
13	3.70	2.50	6.20	0.29	1.80
14	3.70	2.41	6.11	0.26	1.61
15	3.70	2.31	6.01	0.24	1.44
16	3.70	2.22	5.92	0.22	1.29
17	3.70	2.13	5.83	0.20	1.15
18	3.70	2.04	5.74	0.18	1.03
19	3.70	1.94	5.64	0.16	0.92
20	3.70	1.85	5.55	0.15	0.82
21	3.70	1.76	5.46	0.14	0.74
22	3.70	1.67	5.37	0.12	0.66
23	3.70	1.57	5.27	0.11	0.59
24	3.70	1.48	5.18	0.10	0.53

25	3.70	1.39	5.09	0.09	0.47
26	3.70	1.30	5.09	0.08	0.43
27	3.70	1.26	5.09	0.08	0.39
28	3.70	1.11	5.09	0.07	0.35
29	3.70	1.02	5.09	0.06	0.32
30	3.70	0.93	5.09	0.06	0.29
31	3.70	0.83	5.00	0.05	0.26
32	3.70	0.74	4.90	0.05	0.23
33	3.70	0.65	4.81	0.04	0.21
34	3.70	0.56	4.72	0.04	0.18
35	3.70	0.46	4.63	0.04	0.16
36	3.70	0.37	4.53	0.03	0.15
37	3.70	0.28	4.44	0.03	0.13
38	3.70	0.19	4.35	0.03	0.12
39	3.70	0.09	4.26	0.02	0.10
40	3.70	0.00	4.16	0.02	0.09
	111.00	67.99	185.00		37.75

= Amount Of Loan - Discounted Present Value = Grant Element.
$ 111.00 - $ 37.75 = $ 73.25 65.99%

PRINCIPAL AMOUNT : 111.00
NO. OF YEARS :30.00
INTEREST : 0.025

SOURCE : Computed from Data from Econmic Survey of Pakistan 1986-87.

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Table A-3

GRANT ELEMENT
US AID LOAN 1981-82

AMOUNT OF LOAN $ 14 MILLION
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
REPAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interest	Discounted Present Value
1	-	0.35	0.35	0.91	0.32
2	-	0.35	0.35	0.83	0.29
3	-	0.35	0.35	0.75	0.26
4	-	0.35	0.35	0.68	0.24
5	-	0.35	0.35	0.62	0.22
6	-	0.35	0.35	0.56	0.20
7	-	0.35	0.35	0.51	0.18
8	-	0.35	0.35	0.47	0.16
9	-	0.35	0.35	0.42	0.15
10	-	0.35	0.35	0.39	0.13
11	0.47	0.34	0.81	0.35	0.28
12	0.47	0.33	0.79	0.32	0.25
13	0.47	0.32	0.78	0.29	0.23
14	0.47	0.30	0.77	0.26	0.20
15	0.47	0.29	0.76	0.24	0.18
16	0.47	0.28	0.75	0.22	0.16
17	0.47	0.27	0.74	0.20	0.15
18	0.47	0.26	0.72	0.18	0.13
19	0.47	0.25	0.71	0.16	0.12
20	0.47	0.23	0.70	0.15	0.10
21	0.47	0.22	0.69	0.14	0.09
22	0.47	0.21	0.68	0.12	0.08

23	0.47	0.20	0.67	0.11	0.07
24	0.47	0.19	0.65	0.10	0.07
25	0.47	0.18	0.64	0.09	0.06
26	0.47	0.16	0.64	0.08	0.05
27	0.47	0.15	0.64	0.07	0.05
28	0.47	0.14	0.64	0.06	0.04
29	0.47	0.13	0.64	0.06	0.04
30	0.47	0.12	0.64	0.05	0.04
31	0.47	0.11	0.63	0.05	0.03
32	0.47	0.09	0.62	0.04	0.03
33	0.47	0.08	0.61	0.04	0.03
34	0.47	0.07	0.60	0.04	0.02
35	0.47	0.06	0.58	0.03	0.02
36	0.47	0.05	0.57	0.03	0.02
37	0.47	0.04	0.56	0.03	0.02
38	0.47	0.02	0.55	0.03	0.01
39	0.47	0.01	0.54	0.02	0.01
40	0.47	0.00	0.53	0.02	0.01
	14.00	8.57	23.33		4.76

Amount Of Loan	- Discounted Present Value	= Grant Element.
$ 14.00	- $ 4.76	= $ 9.24 65.99%

PRINCIPAL AMOUNT : 14.00
NO. OF YEARS : 30.00
INTEREST : 0.025

Source : Computed from Data from Economic Survy of Pakistan 1986-87.

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Table A-4

GRANT ELEMENT
US AID loan 1982-83

AMOUNT OF LOAN $ 67 MILLION
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
REPAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interest	Discounted Present Value
1	-	1.68	1.68	0.91	1.52
2	-	1.68	1.68	0.83	1.38
3	-	1.68	1.68	0.75	1.26
4	-	1.68	1.68	0.68	1.14
5	-	1.68	1.68	0.62	1.04
6	-	1.68	1.68	0.56	0.95
7	-	1.68	1.68	0.51	0.86
8	-	1.68	1.68	0.47	0.78
9	-	1.68	1.68	0.42	0.71
10	-	1.68	1.68	0.39	0.65
11	2.23	1.62	3.85	0.35	1.35
12	2.23	1.56	3.80	0.32	1.21
13	2.23	1.51	3.74	0.29	1.08
14	2.23	1.45	3.68	0.26	0.97
15	2.23	1.40	3.63	0.24	0.87
16	2.23	1.34	3.57	0.22	0.78
17	2.23	1.28	3.52	0.20	0.70
18	2.23	1.23	3.46	0.18	0.62
19	2.23	1.17	3.41	0.16	0.56
20	2.23	1.12	3.35	0.15	0.50
21	2.23	1.06	3.29	0.14	0.45
22	2.23	1.01	3.24	0.12	0.40
23	2.23	0.95	3.18	0.11	0.36
24	2.23	0.89	3.13	0.10	0.32
25	2.23	0.84	3.07	0.09	0.28
26	2.23	0.78	3.07	0.08	0.26
27	2.23	0.73	3.07	0.08	0.23
28	2.23	0.67	3.07	0.07	0.21
29	2.23	0.61	3.07	0.06	0.19

30	2.23	0.56	3.07	0.06	0.18
31	2.23	0.50	3.01	0.05	0.16
32	2.23	0.45	2.96	0.05	0.14
33	2.23	0.39	2.90	0.04	0.13
34	2.23	0.34	2.85	0.04	0.11
35	2.23	0.28	2.79	0.04	0.10
36	2.23	0.22	2.74	0.03	0.09
37	2.23	0.17	2.68	0.03	0.08
38	2.23	0.11	2.62	0.03	0.07
39	2.23	0.06	2.57	0.02	0.06
40	2.23	0.00	2.51	0.02	0.06

Amount Of Loan	- Discounted Present Vaue	= Grant Element
$ 67.00	- $ 22.79	= $ 44.21 65.98%

PRINCIPAL AMAOUNT :67.00
NO. OF YEARS : 30.00
INTEREST RATE : 0.025

SOURCE : Computed from Data from Economic Survey of Pakistan 1986-87.

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Table A-5

GRANT ELEMENT

US AID LOAN 1983-84

AMOUT OF LAON $ 25 MILLION
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
REPAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interest	Discounted Present Value
1	-	0.63	0.63	0.91	0.57
2	-	0.63	0.63	0.83	0.52
3	-	0.63	0.63	0.75	0.47
4	-	0.63	0.63	0.68	0.43

5	-	0.63	0.63	0.62	0.39
6	-	0.63	0.63	0.56	0.35
7	-	0.63	0.63	0.51	0.32
8	-	0.63	0.63	0.47	0.29
9	-	0.63	0.63	0.42	0.27
10	-	0.63	0.63	0.39	0.24
11	0.83	0.60	1.44	0.35	0.50
12	0.83	0.58	1.42	0.32	0.45
13	0.83	0.56	1.40	0.29	0.40
14	0.83	0.54	1.38	0.26	0.36
15	0.83	0.52	1.35	0.24	0.32
16	0.83	0.50	1.33	0.22	0.29
17	0.83	0.48	1.31	0.20	0.26
18	0.83	0.46	1.29	0.18	0.23
19	0.83	0.44	1.27	0.16	0.21
20	0.83	0.42	1.25	0.15	0.19
21	0.83	0.40	1.23	0.14	0.17
22	0.83	0.38	1.21	0.12	0.15
23	0.83	0.35	1.19	0.11	0.13
24	0.83	0.33	1.17	0.10	0.12
25	0.83	0.31	1.15	0.09	0.11
26	0.83	0.29	1.15	0.08	0.10
27	0.83	0.27	1.15	0.08	0.09
28	0.83	0.25	1.15	0.07	0.08
29	0.83	0.23	1.15	0.06	0.07
30	0.83	0.21	1.15	0.06	0.07
31	0.83	0.19	1.13	0.05	0.06
32	0.83	0.17	1.10	0.05	0.05
33	0.83	0.15	1.08	0.04	0.05
34	0.83	0.13	1.06	0.04	0.04
35	0.83	0.10	1.04	0.04	0.04
36	0.83	0.08	1.02	0.03	0.03
37	0.83	0.06	1.00	0.03	0.03
38	0.83	0.04	0.98	0.03	0.03
39	0.83	0.02	0.96	0.02	0.02
40	0.83	0.00	0.94	0.02	0.02
	25.00	15.31	41.67		8.50

Amount Of Laon	- Discounted Present Value	= Grant Element.
$ 25.00	- $ 8.50	= $ 16.50 66%

PRINCIPAL AMOUNT : 25.00
NO. OF YEARS : 30.00
INTEREST RATE : 0.025

Source : Computed from Data from Economic Survey of Pakistan 1986-87.

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Table A-6

GRANT ELEMENT
US AID LOAN 1984-85

AMOUNT OF LOAN $ 83 MILLION
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
REPAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interest	Discounted Present Value
1	-	2.08	2.08	0.91	1.89
2	-	2.08	2.08	0.83	1.71
3	-	2.08	2.08	0.75	1.56
4	-	2.08	2.08	0.68	1.42
5	-	2.08	2.08	0.62	1.29
6	-	2.08	2.08	0.56	1.17
7	-	2.08	2.08	0.51	1.06
8	-	2.08	2.08	0.47	0.97
9	-	2.08	2.08	0.42	0.88
10	-	2.08	2.08	0.39	0.80
11	2.77	2.01	4.77	0.35	1.67
12	2.77	1.94	4.70	0.32	1.50
13	2.77	1.87	4.63	0.29	1.34
14	2.77	1.80	4.56	0.26	1.20
15	2.77	1.73	4.50	0.24	1.08
16	2.77	1.66	4.43	0.22	0.96
17	2.77	1.59	4.36	0.20	0.86
18	2.77	1.52	4.29	0.18	0.77
19	2.77	1.45	4.22	0.16	0.69

20	2.77	1.38	4.15	0.15	0.62
21	2.77	1.31	4.08	0.14	0.55
22	2.77	1.25	4.01	0.12	0.49
23	2.77	1.18	3.94	0.11	0.44
24	2.77	1.11	3.87	0.10	0.39
25	2.77	1.04	3.80	0.09	0.35
26	2.77	0.97	3.80	0.08	0.32
27	2.77	0.90	3.80	0.08	0.29
28	2.77	0.83	3.80	0.07	0.26
29	2.77	0.76	3.80	0.06	0.24
30	2.77	0.69	3.80	0.06	0.22
31	2.77	0.62	3.73	0.05	0.19
32	2.77	0.55	3.67	0.05	0.17
33	2.77	0.48	3.60	0.04	0.15
34	2.77	0.42	3.53	0.04	0.14
35	2.77	0.35	3.46	0.04	0.12
36	2.77	0.28	3.39	0.03	0.11
37	2.77	0.21	3.32	0.03	0.10
38	2.77	0.14	3.25	0.03	0.09
39	2.77	0.07	3.18	0.02	0.08
40	2.77	0.00	3.11	0.02	0.07
	83.00	50.84	138.33		28.23

Amount Of Loan	- Discounted Present Value	= Grant Element.
$ 83.00	- $ 8.50	= $ 16.50 66%

PRINCIPAL AMOUNT : 83.00
NO. OF YEARS : 30.00
INTEREST RATE : 0.025

SOURCE : Computed from Data from Economic & Survey of Pakistan 1986-87.

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Table A-7

GRANT ELEMENT
US AID LOAN 1986-87

AMOUNT OF LOAN $ 91 MILLION
INTEREST RATE 2.5% GRACE PERIOD 10 YEARS
REPAYMENT PERIOD 40 YEARS

Year	Principal	Interest	Total $ M	Discount Factor At 10% Rate Of Interest	Discounted Present Value
1	-	2.28	2.28	0.91	2.07
2	-	2.28	2.28	0.83	1.88
3	-	2.28	2.28	0.75	1.71
4	-	2.28	2.28	0.68	1.55
5	-	2.28	2.28	0.62	1.41
6	-	2.28	2.28	0.56	1.28
7	-	2.28	2.28	0.51	1.17
8	-	2.28	2.28	0.47	1.06
9	-	2.28	2.28	0.42	0.96
10	-	2.28	2.28	0.39	0.88
11	3.03	2.20	5.23	0.35	1.83
12	3.03	2.12	5.16	0.32	1.64
13	3.03	2.05	5.08	0.29	1.47
14	3.03	1.97	5.00	0.26	1.32
15	3.03	1.90	4.93	0.24	1.18
16	3.03	1.82	4.85	0.22	1.06
17	3.03	1.74	4.78	0.20	0.95
18	3.03	1.67	4.70	0.18	0.85
19	3.03	1.59	4.63	0.16	0.76
20	3.03	1.52	4.55	0.15	0.68
21	3.03	1.44	4.47	0.14	0.60
22	3.03	1.37	4.40	0.12	0.54
23	3.03	1.29	4.32	0.11	0.48
24	3.03	1.21	4.25	0.10	0.43
25	3.03	1.14	4.17	0.09	0.38
26	3.03	0.06	4.17	0.08	0.35
27	3.03	0.99	4.17	0.08	0.32
28	3.03	0.91	4.17	0.07	0.29
29	3.03	0.83	4.17	0.06	0.26
30	3.03	0.76	4.17	0.06	0.24

31	3.03	0.68	4.09	0.05	0.21
32	3.03	0.61	4.02	0.05	0.19
33	3.03	0.53	3.94	0.04	0.17
34	3.03	0.46	3.87	0.04	0.15
35	3.03	0.38	3.79	0.04	0.13
36	3.03	0.30	3.72	0.03	0.12
37	3.03	0.23	3.64	0.03	0.11
38	3.03	0.15	3.56	0.03	0.10
39	3.03	0.08	3.49	0.02	0.08
40	3.03	0.00	3.41	0.02	0.08
	91.00	55.74	151.67		30.95

Amount Of Loan	- Discounted Present Value	= Grant Element
$ 91.00	- $ 30.95	= $ 60.05 65.98%

PRINCIPAL AMOUNT : 91.00
NO. OF YEARS : 30.00
INTEREST RATE : 0.25

SOURCE : Computed from Data from Economic survey of Pakistan 1986-87.

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BOOK REVIEW

OUTLINES OF ECONOMIC PLANNING WITH SPECIAL REFERENCE TO PAKISTAN.

By Dr Muhammad Aslam, Publishers Emm Emm
445-Karim Block, Allama Iqbal Town, Lahore (Jan.1990)

Reconstruction of human society on rational lines particularly in the economic sphere of human activity, as against the haphazard interplay of independent individuals imbibed with their highly prejudiced and profit motivated vested interests, has become the welfare-based economic order of the day. Thus 'management of the household' is the natural way to achieve the welfare objectives to reconstruct the human society, through free competitive open market operations based on conscious decisions of the priority determining authority, i.e. the state and that too after settling politically determined economic priorities and thus regularising the activities of the individuals by a measure of compulsion, while synthesizing and blending of the central decisions with the free market mechanism.

This is all what is required in economic planning, the theoretical aspects of which have been explained and elaborated with references from Pakistan and other U.D.Cs. in the recently published book (January 1990) named *Outlines of Economic Planning* by Dr. Muhammad Aslam of Government College, Lahore. The forward has been written by economist-cum-civil servant Dr. Muhammad Arif.

While defining Economic Planning on two lines, Indicative Planning and Imperative Planning (Chapter-II) reference to 'Perestroika' and 'Glasnot' as the latest moves in the field of socio-economic reconstruction of socialist society is worthy of note and a food for thought for students of economics and economic planning. That affords an uptodate progressive touch to the economic text on planning in this book. The study material is however almost entirely based on American and Western economic literature. The consultation of the Russian or Chinese sources particularly on imperative planning would have certainly added more to the already rich store of economic thought on planning contained in the book.

The author perhaps never intended to produce an exhaustive volume on economic planning for advance study and thus for the students he has been quite successful and worthy of appreciation for whatever he has given in series of very well constructed sentences containing information for the fairly advance study and thought. The language is simple, devoid of complicated technical flare and the style of expression is indeed direct and simple which amply suits the intellectual requirements of students for deep understanding of the subject. It is not technical-terminology ridden or mathematically treated.

The book under review is more theoretical in study and less opinion oriented. That is good and fair. That keeps up its study value for the students. The appearance of such a book on economic planning is timely in Pakistan because it is high time for the planners of Pakistan to correct their direction towards

the establishment of a welfare state based both on indicative and imperative planning. In a country like Pakistan the introduction of 'command Economy' in the Federal Planning is essential for national integrity and political cohesion and certainly 'Concerted Economy' in the federated units is a must, which can be achieved through indicative planning. For that matter the book is of tremendous intellectual and practical import for students of today and planners of tomorrow. It will certainly fulfil the need for rationality in economic planning in Pakistan.

After having explained the 'Origin and Evolution of Planning' in Chapter I and its rationale in Chapter III, the author takes up explaining the Indicative and Imperative Planning at length in Chapter II. Chapter IV of the book gives outlines for establishing an agency for plan formulation and the actual process of plan construction. Both are very useful and exhaustive chapters on theoretical knowledge on the subject. Plan formulation through a well informed and well staffed agency is a must in the modern age of economic planning. Through such an agency economic growth is assessed and growth rate is determined. This is explained in Chapter VI.

The Chapters VII and VIII deal with fair understanding of the technical aspects of plan consistency and the techniques used in finding out the optimum combination of the two frontline factors of production, namely labour and capital. How the man-power requirements and potentialities are assessed and reconciled in planning is elaborated in Chapter IX which also discusses various dimensions of manpower planning in Pakistan.

In Chapter X the author has explained the rules and criteria on which a capital resource is allocated and the investment made on the basis of priorities set forth. These investment decisions must be arrived at after specific objectives are determined and proper prioritization is achieved based on realistic statistical data. The allocative decisions regarding factors of production should be based on adjusted prices or shadow prices (Chapter XI) after the plan period (Chapter V) is decided. Thus the plan is prepared and implementation of the plan is carried consistently (Chapter VII) through project appraisal (Chapter XII). The plan programme is completed through the project-wise evaluation. How the project evaluation is undertaken and on what criteria is assessed is given in Chapter XIII. Chapter XIV dealing with the capital-output ratio should have been dealt earlier near about the investment criteria. To give economic planning a realistic outlook on comprehensive lines, the last Chapter XV brings out elaborately the problems and difficulties as encountered in the planning carried out in the U.D.Cs. This is a useful addition for students and planners.

The subject under study in the book is the veritable result of deeply and widely read and well thought over book material provided by well stocked library on economic planning. The book list provided at the end is quite exhaustive. The subject of economic planning is brought out with scholarly taste and has been put forth in comprehensive manner and style good for students.

Prof. G.M. Din Mirza