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An Evaluation of Pakistan's Third Five Year
Plan.

By

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AN EVALUATION OF PAKISTAN'S THIRD FIVE YEAR PLAN

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Keith B. Griffin

and

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I. Performance During the Second Plan

Prior to 1960 Pakistan's economic performance was notably poor. During the Second Five Year Plan period (1960-65), however, considerable progress was achieved. All the major targets were exceeded: GNP was expected to grow 24 per cent over the period; government data show that it grew 29 per cent. Per capita income was expected to increase by 10 per cent; it appears that in fact, it grew 13 percent. The most surprising features of Pakistan's development during the last five years were the high rate of growth of exports and the breakthrough achieved in agriculture. Foreign exchange earnings were expected to grow by only 15 per cent over the period, whereas they actually grew 40 per cent. Agricultural output had only increased by 7 per cent during the First Plan and it was hoped that the rate would nearly double during the Second; in fact, agricultural output is reported to have increased by 19 per cent. In contrast, the over-achievement in industry--though impressive--was somewhat less. A 47 per cent increase in output was projected for the sector and a 51 per cent increase was achieved.

There were, of course, short-falls in few sub-sectors. A sample of the more important deficiencies might include

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the following: Only half the budget allocated to family planning was spent; exports of cotton manufactures were Rs. 250 million less than projected; output of cement at the end of the plan period was 2.4 million tons less than the 4.0 million ton target; only 200 of the modest projection of 320 rural health centers were established. These deficiencies, viewed either separately or together, are not particularly serious and can be corrected rather easily. Worries about Pakistan's past growth performance, and her ability to sustain it, center on other issues.

The above-target achievements for exports can largely be attributed to three items: raw cotton, miscellaneous exports, and invisibles. The latter was nearly as important as the first two combined. What will happen to invisible earnings during the next five years is uncertain. It is known, however, that emigrants' remittances from the U.K. represent a large component of total invisibles and they have been growing rapidly. It is also known that Britain has recently tightened her controls over immigration. One might reasonably expect, therefore, that in the future the growth rate of remittances will be lower. What will happen to miscellaneous exports is completely unknown.

The interpretation of the recent export performance of raw cotton depends upon the time perspective one adopts. Exports of raw cotton in 1964-65 were about 20 per cent lower than exports a decade earlier. On the other hand cotton exports increased dramatically beginning in 1952-53. If one projects the recent experience, the future looks quite promising; if one projects the experience of a decade, it looks less promising.

The behavior of exports of raw cotton appears to be the result of two conflicting trends. Until 1960-61 cotton pro-

duction in West Pakistan was stagnant; at the same time domestic consumption of cotton by the new textile industry grew rapidly. As a consequence the volume of cotton available for export diminished. More recently, however, cotton output has increased and the rate of growth of domestic consumption has been reduced. This has led to a sharp rise in the exports of raw cotton. Whether the recent export performance can be sustained depends upon whether these two trends continue.

During the four years from 1960-61 to 1963-64 output of crops grown primarily in West Pakistan rose quite sharply. Cotton production increased 20 percent, wheat output increased 8.4 percent and sugarcane production increased 26.5 per cent. The major explanation for this growth lies in the substantial increase in private investment in tubewell irrigation and the use of fertilizers in this province. Agricultural performance in East Pakistan, in contrast, is rather puzzling. Jute output declined by 1.7 per cent, while rice output is believed to have increased by 27.5 per cent. There were no dramatic changes in the area cultivated; the major increase in rice output is attributed to rising yields--which reportedly increased 36 per cent between 1957 and 1964. Yet we know that the use of unconventional inputs did not rise very much. Thus it is quite possible that output of foodgrains in East Pakistan has been overstated. Since rice output represents over a quarter of East Pakistan's gross product, a slight overstatement would be serious. Such an overstatement would imply that the true rates of growth of East Pakistan's income and the GNP are lower than are reported, and the per capita income disparity between the two wings is wider.

II. Overall Strategy During the Third Plan

a) Growth targets

The growth strategy of the Third Plan is to build upon

the success achieved during the Second and to accelerate further the rate of expansion of national output. It is anticipated that the annual average compound rate of growth of GNP will increase from 5.2 per cent to 6.5 per cent. The trend rate of growth at the end of the Second Plan is believed to have been 5.7 per cent, so that, in effect, the strategy over the next five years is to increase this instantaneous rate by 14 percent to the projected average. As shown in Table I, this is to be accomplished by accelerating expansion in each major sector.

TABLE I
ACHIEVED AND ANTICIPATED SECTORAL GROWTH RATES
(annual compound percentage rate of growth)

	Second Plan (achievement)	Third Plan (target)
G.N.P.	5.2	6.5
Agriculture	3.5	5.0
Industry	8.6	10.0
Services	6.7	7.1
Exports	7.0	9.5
Income per capita	2.5	3.8

Source: Third Five Year Plan

Each of the sector targets will be considered in more detail below. It should be pointed out here, that the success of the Plan will depend in large measure upon whether Pakistan (i) is able to induce a sharp acceleration in the rate of increase of agricultural output, and (ii) is able to sell a rapidly growing proportion of her domestic output abroad. The Plan requires an increase of 43 and 36 percent in the rate of growth of agricultural output and exports respectively.

b) Domestic savings

Gross domestic saving as a percentage of GNP appears to

have increased: the proportion was 6.8 per cent in 1954-55; it fell to 5.9 per cent in 1959-60; but by 1964-65 it had risen again to 9.5 per cent. The intention of the Third Plan is to further increase the ratio to 13.6 per cent by 1969-70. To do this a marginal savings rate of .22 has been projected. This national aggregate appears to be a weighted average of essentially two major elements. First, the Plan informs us that large-scale industry "was saving and re-investing nearly 75 percent of its profits".^{1/} There is very little evidence for this assertion but it appears to be an important assumption underlying the plan strategy. Secondly, we are told that "the Government's marginal rate of saving from its revenue will be over 40 per cent," and that "revenues are expected to rise by 70 per cent."^{2/}

Let us consider the assumptions about public savings first. The present ratio of government receipts to national income is 11 per cent. The projections of growth rates of revenue (70 per cent) and GNP (38 per cent) over the plan period imply that the marginal propensity to tax (including tax changes) is 20.3 per cent.^{3/} They also imply that the ratio of government receipts to GNP will be 13.55 per cent in 1969-70. The plan chapter on "Resources and Financing", however, states that even if all proposed additional taxation is imposed government revenues will only be 13 per cent of GNP at that date. Thus it is quite likely that public savings will be somewhat lower than is expected--even if the marginal propensity to save out of taxes is 40 per cent and the contemplated additional taxes are in fact levied.

The assumption included in the plan suggest that 3.1 percentage points of the 22 per cent marginal savings rate will be generated in the public sector.^{4/} The remaining 13.9 per cent must come from private savings. It is known, however, that private non-corporate savings have shown no tendency whatever to increase.^{5/} This means that the increased private

savings are expected to come from the corporate sector, and especially large-scale industry.

There is very little reliable information as to the share of profits of large-scale industry in national income. The national accounts, however, indicate that value added in this sub-sector represents about 7.2 per cent of GNP. The Deputy Chairman of the Planning Commission claims that the share of wages in the total income of industry is 30 per cent. Let us assume, therefore, that profits account for the remainder, i.e. for 70 per cent. This means that at most the profits of large-scale manufacturing are 5.04 per cent of GNP ($=7.2 \times .70$). If we assume (a) this ratio remains roughly constant during the next five years and (b) that 75 per cent of these profits are saved, the maximum contribution toward raising the marginal rate of savings to the required level that can come from this sector is 3.8 percentage points ($=5.04 \times .75$). The remaining 10.1 percentage points must come primarily from the agricultural and services section.

Following the same procedure as before, we learn from the national accounts that agriculture and services represent 49.1 and 40 per cent respectively of GNP. Let us assume, in accordance with Saïd Hasan's hint, that the share of profits in the two sectors is 20 and 50 per cent respectively. Then the combined profits from agriculture and services must represent nearly 30 per cent of GNP ($49.1 \times .20 + 40 \times .50 = 29.82$). Again assuming this ratio remains roughly constant during the next five years, over a third of the profits generated in these two sectors will have to be saved in order to meet the marginal savings target. ($10.1/29.82 = 33.9\%$). It is unlikely that such a high rate can be achieved under present conditions.

Thus it appears to us that the projections of domestic savings are overly optimistic. (i) It is unlikely that the total elasticity of the tax system will be as high as 1.5.

(ii) It is unlikely that the marginal rate of savings out of corporate profits will be .75. (iii) In view of the poverty in most of the agricultural and services sectors and the low incentives provided them, it is unlikely that the marginal rate of savings out of profits will approach .34 in these sectors.

(c) Income distribution

The distribution of income has been a major ingredient of the strategy for economic development in Pakistan. The planners believe "it is clear that the distribution of national product in the Third Plan should be such as to favour the saving sectors".^{8/} In practice this has meant that policies redistributing income from the rural to the urban areas, from agriculture to industry have been favoured. It has been argued elsewhere that per capita consumption and income in rural areas are no higher today than they were in 1949-50, although the latter rose quite rapidly during the last five years.^{9/}

A large part of the increase in per capita income has been channeled to the urban areas, and particularly to the upper income groups. The bottom 5 per cent, and even the lower 45 per cent, of the urban population have incomes substantially below the equivalent groups in the rural sectors of both East and West Pakistan.^{10/} The top 5 per cent of the population in Karachi have an income 27 times higher than the bottom 5 per cent, and nearly 7 times higher than the national average.

In spite of this extremely skewed distribution private savings remain quite low.

It is, in fact, a common fallacy to suppose that an unequal distribution of income automatically leads to a high savings rate. It is quite as likely to lead simply to an unequal distribution of consumption. Moreover, even if income inequality leads to high rates of capital accumulation, there is no guarantee that the composition of this investment will

reflect social priorities. The opposite is likely to be true: investment will be directed into projects which yield the highest profits. Monetary returns, however, will depend upon the level and composition of demand, which in turn depends upon the distribution of income. Hence investment is likely to be undertaken to produce goods consumed mostly by wealthier groups of the nation, e.g. luxury houses, cosmetics and perfumes, consumer durables. The level of savings and the composition of investment can best be determined not by the crude device of redistributing income but by using the government's control system (e.g. fiscal policy, direct investment, price incentives) to induce and compel the desired response. With proper management there need be no conflict between growth and equity.

III. Sector Targets.

a) The Allocation of investment

Despite the modest domestic savings performance, the level of investment has been increasing rapidly over the last 15 years, principally as a result of the large inflows of foreign aid. Total development expenditure in the Third Plan is to be Rs. 52,000 million, or an average of Rs.10,400 million per annum. By the end of the Third Plan the investment: GNP ratio is expected to rise to 20.2 per cent.

TABLE II
THE LEVEL AND RATE OF INVESTMENT
(Rs. million)

	<u>1949-50</u>	<u>1954-55</u>	<u>1959-60</u>	<u>1964-65</u>	<u>Average of Third Plan</u>
Public Investment	310	610	1710	3070	6,000
Private Investment	810	1590	1720	3320	4,400
Total ^a Investment	1120	2200	3430	6390	10,400
Public Investment as percentage of Total investment	28	28	50	48	58

TABLE II (Cont'd)

	<u>1949-50</u>	<u>1954-55</u>	<u>1959-60</u>	<u>1964-65</u>	<u>Average of Third Plan</u>
Gross Investment as percentage of GNP	4.6	7.9	10.9	15.8	20.2 ^b

Source: Third Five Year Plan, pp. 4-5, 19, 40.

a
Excludes investment in Indus Basin Works
b
1970

It can be seen in Table II above that public investment, although starting at a very low level, has increased considerably faster than private investment. As a result by 1970 the share of public investment in the total will have increased from less than thirty percent to nearly sixty percent. Had public investment maintained its original relationship to private investment, the projected development program and rate of growth in the Third Plan would have been approximately 40 per cent lower. The high rate of growth of public investment has been, and will continue to be, a major factor in accelerating Pakistan's overall rate of development.

The allocation of investment among the major sectors has varied considerably from one period to another. Data for the three Five Year Plans, as well as the pre-plan period (1950-55), are presented in Table III.

TABLE III
THE ALLOCATION OF INVESTMENT

	<u>1950-51</u>	<u>1955-60</u>	<u>1960-65</u>	<u>1965-70</u>
Agriculture	6	7	13	15
Water and power	13	17	19	15
Industry, fuel and minerals	36	31	28	26
Transportation and Communication	14	17	17	18
Physical planning and housing	22	20	15	13
Education	5	6	4	5
Health	3	2	1	2
Social welfare and manpower	1	-	neg.	1
Public works programme	-	-	3	5

Source: Third Five Year Plan, p.48

Housing and industry, the two sectors which are dominated by private investment, have declined steadily in relative importance. This is consistent with our earlier analysis of the trends in public and private investment. It does not imply, of course, that the absolute expenditure in these two categories is declining.

The proportionate expenditure on water and power will fall by over 20 percent in the Third Plan, while the allocation to transportation and communication will increase slightly. The net effect will be an 8 per cent fall in the relative expenditure on social overhead capital. As the productivity of investment in this sector is fairly low, the relative decline is welcome.

Most encouraging has been the steady increase in the share of development expenditure going to agriculture. The Third Plan has allocated 15 percent of investment to this sector. Although this is a relatively low proportion, it re-

presents a 114 per cent increase over the First Plan allocation. Moreover, beginning in the last half of the Second Plan, a fairly substantial public works programme was begun. The object of this scheme is to mobilize the unemployed by putting them to work on small-scale, labour-intensive investment projects. The Third Plan has allocated 5 per cent of its resources to this programme, most of which will be spent in rural areas. Thus the combined allocation to the rural sector will be 20 per cent or more, inasmuch as a considerable proportion of the expenditure on Water and Power should be agriculture.

The allocation to education has been consistently low. This is one of the most serious weaknesses of the Third Plan and is discussed in more detail in a later section of the essay.

One of the politically most delicate problems in Pakistan is the allocation of investment between the two wings. In 1963-64 it was estimated that the per capita income in West Pakistan was about 27 per cent higher than in East Pakistan. A principal concern of the planners, in accordance with Article 145 of the Constitution, is the removal of this income disparity in the shortest possible time. It is a specific objective of the Perspective Plan to eliminate the disparity by 1985.

In the Third Plan the disparity is narrowed by projecting a 7 per cent annual rate of growth for East Pakistan and a 6 per cent rate for West Pakistan. The investment allocations underlying these projections are as follows:

TABLE IV
THE REGIONAL ALLOCATION OF INVESTMENT

(Rs. million)

	<u>East Pakistan</u>	<u>West Pakistan</u>
Public Investment	15,000	14,000
Private Investment	11,000	11,000
Total Investment	27,000	25,000

Source: Third Five Year Plan, p.130

It is expected that Rs. 2,000 million more will be invested in East Pakistan than in West Pakistan.. This is to be achieved (a) by allocating 53 percent of public expenditure to the east wing and (b) by assuming that private investment will be divided equally among the two Provinces.

In fact, public expenditure in West Pakistan will be considerably higher than the data of the Planning Commission indicate. This is because the entire Indus Basin Works, the total cost of which is over \$ 900 million, is excluded from the Plan. Once the Works are completed output and income in West Pakistan will substantially increase and the income disparity will widen.

Similarly, the assumption about private investment is completely unrealistic. Private investment in East Pakistan during the Second Plan period was Rs.3,300 million, whereas it was Rs.3,600 million in West Pakistan. During the Third Plan private investment in both wings suddenly is expected to become equal. Yet it is common knowledge that private investment is not only larger but also more dynamic in West Pakistan. The plan document itself includes several references to "the relative shyness of the private sector to invest in this region", i.e. in East Pakistan.^{11/} Thus there is virtually no likelihood that the east wing can achieve the private investment target set for it.

Income disparities, both in absolute and relative terms, are likely to increase during the Third Plan. The anticipated achievements in the plan document are clearly an over-statement. As such they may have some propaganda value, but if the authorities believe the planners' projections serious policy errors may be caused.

b) Industrialization

Although industrial investment has gradually declined as a proportion of total development expenditure through the years of Pakistan's planning history, it has remained, throughout, the sector claiming the largest share. This will continue to be true in the Third Plan period, when the planners expect 26 per cent of the total to go to that sector-- as compared to 28 per cent in the Second Plan period. The total expenditure of Rs. 12,880 million is to be divided 54 per cent to 46 per cent in favour of the east wing.

Although it was noted above (section III-a) that virtual equality was expected in private sector investment outlays (of all sorts) for the Third Plan period, the program for industrial investment shows that the west wing is to enjoy an 18 per cent advantage, while receiving less than half as much of public industrial investment as East Pakistan.^{12/} The breakdown of allocations is shown in Table V.

TABLE V
REGIONAL ALLOCATION OF INDUSTRIAL DEVELOPMENT
EXPENDITURE FOR THE THIRD PLAN PERIOD
(Rs. million)

	<u>East Pakistan</u>	<u>West Pakistan</u>	<u>Total</u>
Public Sector	3100	1480	4580
Private Sector	<u>3800</u>	<u>4500</u>	<u>8300</u>
	6900	5980	12,880

Source: Third Five Year Plan, p.474

Table VI shows the East-West breakdown by industry groups. Textile manufactures, basic metals, chemicals, and non-metallic mineral products are, in the order named, the most important

items on the list. These four account for half of total intended industrial investment. Parity is maintained nicely among these top four, with each wing being allocated the larger share in two groups, and with the two wings coming out virtually even in total allocations to the four. As indicated in our earlier discussion, too much is expected of private enterprise in the East Wing. In textiles, for example, all but Rs. 77 million of the East Wing's investment is to come from private sources, and in food (60 per cent), petrochemicals (61 per cent), non-metallic mineral products (60 per cent), and transport equipment (45 per cent), the private sector is given a very large share to carry.

The allocations shown in Table VI do not indicate that great strides are intended in the direction of the Plan's stated goal of shifting toward low-import, high-value-added capital goods production, although that is scarcely surprising, given the established pattern of Pakistani industry.

TABLE IV

INVESTMENT BY INDUSTRY GROUPS
(Rs. Million)

<u>Industry group</u>	<u>East Pakistan</u>	<u>West Pakistan</u>	<u>Total</u>
Food manufacture	486	300	786
Textiles	1477	1000	2477
Paper and products	534	100	634
Chemical industries	885	585	1470
Petrochemicals	376	450	826
Non-metallic mineral products (cement)	419	561	980
Basic metals	441	1105	1546
Machinery, except electrical machinery	195	412	607
Transport equipment	556	144	700
Other ^{a/}	1531	1323	2854
	<u>6900</u>	<u>5980</u>	<u>12,880</u>

a/ industries for which Third Plan expenditure totals less than Rs. 500 million

Source: Third Five Year Plan, p.474

Consumer goods such as food manufactures, textiles and paper account for thirty per cent of the total outlays.]

According to the Plan, the criteria utilized in allocating these funds were the following: (1) the balance of payments effect, (2) value added and return on capital, and, (3) the employment effect. In addition to these criteria there are several constraints and conditions. The planners choose to continue to place "major reliance" on private investment. The Plan states^{13/} that "Public industrial investment will be undertaken only in those cases where private capital is not forthcoming, where a joint venture cannot be organized or where considerations of national interest dictate public investment." Furthermore, concentration through industrial integration should be avoided, and (as already noted) the problem of disparity must be given paramount weight.

The plan states^{14/} that investment will be sanctioned "by new procedures which will apply input/output analysis". Production targets are to be derived from an inter-industry model, from which, in turn, are derived investment targets. These targets (presumably modified in some way by application of the criteria and constraints discussed above) are then to be translated into financial sanctions in annual "Investment Schedules".

Prior to the Third Plan period, little effort was made to guide or coordinate investment: "it was left largely to the private sector to decide the direction of these investments behind a protective shelter...."^{15/} In all probability, use of a programming model of any degree of sophistication and detail in investment sanctioning will not get under way for some time yet. The "first step" in the procedure, in the form of an outline based on a 54-square inter-industry model, did not appear until late July, 1965,^{16/} when the 1965/66 investment schedules were already in the process of preparation.

Casual procedure in allocation of investment was perhaps acceptable in the first two Plan periods, but the rapid transformation of the economy which the Third Plan expects to occur makes greater precision essential. The manufacturing sector contributed a little more than nine per cent of Gross National Product in 1959/60 (the terminal year of the First Plan period), while in 1964/65, that proportion had risen to an estimated eleven per cent. Roughly that rate of transformation is expected to continue, ^{17/} so that by 1969/70, manufacturing will provide more than one-eighth of GNP. That sector looms larger still as a proportion of total investment (more than one-fourth), and in terms of the burden which it is expected to carry in minimizing imports and expanding exports (see section III-e, below).

The implied intention of the Plan, then, is to shift from an essentially un-planned industrial sector to a more explicitly regulated one, in time. A study under way at the Pakistan Institute of Development Economics will show that the correspondence between Investment Schedules and realized investment was non-existent during the Second Plan period, and that, although sanctions may have inhibited investment to some extent through administrative friction, they did not succeed in coordinating planning goals and performance. Given heavy reliance on private entrepreneurs and heavy subsidization through protection (and hence very high profit rates), this result is scarcely surprising. It remains to be seen whether more integrated planning can be accomplished while nearly two-thirds of total investment in industry remains in private hands.

It is hoped that special attention will be given to the "value added and return on capital" criterion. Such evidence as exists ^{18/} suggests that industry in Pakistan is very inefficient and that its growth is being pushed at a high social cost. The gradual shift from plan-to-plan in favor of increasing

agriculture's share of development expenditure suggests a gradual realization of high returns in that sector, and is to be welcomed. Higher priority for investment in human resources also seems clearly warranted (see section IV, below).

In sum, the industrial sector, because of the dynamic response of entrepreneurs to high profits in protected markets, has been given the role of leading sector, without the social and economic costs having been carefully counted. As the planning system becomes more comprehensive and (hopefully) more rational, these costs should become more explicit and alternative investments choices will be given heavier weight. This will take time, however, as the Third Plan shows only the most modest inclinations in that direction.

c) Agriculture

Pakistan is no exception to the general pattern of underdevelopment so far as the role of agriculture is concerned. The burst of industrial growth in the country has tended to divert attention from the source of income of more than four-fifths of the nation's people. However, agricultural production staged a quite remarkable upsurge during the Second Plan period. After having failed to match population growth for more than a decade, farmers responded well to the combination of good weather, increased irrigation water supplies, and to increased availability of fertilizer and other non-conventional inputs, with the result that the sector's contribution to economic growth in the Second Plan period was (in absolute terms) more than twice that of the much smaller industrial sector.^{19/}

While this surprise is a most encouraging one, it is recognized by the planners to be an insufficient growth performance, and much more is expected of this vital sector for the next five years. The Plan for an over-all increase in agricultural output of five per cent per annum,^{20/} which, if accomplished, will yield a rate of growth which would clearly

outstrip population growth for the first time in Pakistan's history.^{21/} If this goal is missed by very much on the other hand, the Third Plan will surely fall short as a whole, for the agricultural growth increment is to be thirty-five per cent of the total increment--and will again have to bear a much larger absolute burden than manufacturing, even though the share of development expenditure allocated to agriculture, forestry and fisheries will remain well below that allocated to manufacturing (15.4 per cent vs. 26.1 per cent.^{22/}) It should be added, however, that this comparison of sectoral allocations given in the plan is somewhat misleading because of very substantial outlays to other "non-agricultural" sectors which contribute significantly to agricultural productivity--and probably more than to industry. Water and Power will receive virtually as large an allocation (15.2 per cent) as agriculture proper, and the Public Works programme, which is in large measure agriculture-connected, will receive 4.8 per cent of the total. Furthermore, the gigantic Indus Basin programme will spend on the order of Rs. 2800 million in the Third Plan period, which (although outside the plan accounting) is more than five percent as large as the total Plan outlay. Thus, although industry is getting more than its "share", agricultural development is by no means being ignored. The general structure of public sector outlays for agriculture, forestry and fisheries (not including the Public Works programme, water development expenditures, or Indus Basin expenditures), is shown in Table VII. A summary of major crop growth goals is given in Table VIII.

The production goals shown in Table VIII represent significant departures from Second Plan performance in the case of wheat and jute, particularly the latter. Inasmuch as jute and rice are competitive for acreage, the target shown here will require a shift of land use in East Pakistan of considerable size, along with a substantial increase in productivity in rice

culture. The optimism for cotton and wheat stems mainly from favorable expectations for irrigation water and fertilizer in West Pakistan plus seed improvement.

TABLE VII

ALLOCATION OF PUBLIC SECTOR OUTLAYS IN
AGRICULTURE FOR THE THIRD FIVE YEAR PLAN
(Rs. million)

	East Pakistan	West Pakistan	Azad Kashmir and Northern Areas	All Pakistan
Manure and fertilizer	484.20	677.70	5.28	1167.18
Plant protection	341.17	300.07	1.25	642.49
Mechanization	270.00	213.74	nil	483.74
Food grain storage	188.30	67.67	nil	255.97
Animal husbandry	101.80	111.78	3.59	217.17
Forestry	150.00	196.40	13.14	359.54
Fisheries	170.71	108.38	0.56	279.65
All other ^{a/}	<u>549.66</u>	<u>700.34</u>	<u>11.69</u>	<u>1261.69</u>
	2255.84	2376.08	35.51	4667.43

^{a/} sectors receiving allocations of less than Rs. 200 million

Source: Third Five Year Plan, pp. 459-60

TABLE VIII

BENCHMARKS AND TARGETS OF CROP PRODUCTION FOR
THE THIRD PLAN, SELECTED MAJOR CROPS

Crop	Plan ^{a/} Benchmarks	Plan Targets	Increase, targets over benchmarks	Increase 3rd Plan bench- marks over 2nd Plan benchmarks
	(thousand tons)		(per cent)	
Rice	11,400	14,445	27	36.7
Wheat	4,157	5,464	31	12.3
Sugar cane	20,750	28,300	36	34.5
Jute	6,200	8,000	29	3.3
Cotton	2,217	3,520	59	33.1

^{a/} determined mainly on the basis of ten year linear trends

Source: Third Five Year Plan, pp.410,414.

Wheat breeding experiments at the Agricultural University in Lyallpur have yielded remarkably good results with crosses

between Mexican and indigenous strains.

The Plan says little of a specific nature about the way in which agricultural growth will be divided between the two wings. It is stated however, that the division is to be, roughly, 5.5 per cent per annum in the West Wing and 4.5 per cent per annum in the East Wing.^{23/} It seems likely that the discrepancy in growth rates will be greater than that. A study by two members of the Harvard University advisory team at the Planning Commission concludes that the agricultural sector of West Pakistan should grow by approximately 6.2 per cent per annum, given the inputs scheduled for that area in the Plan.^{24/} On the other hand, any substantial acceleration of yields beyond that experienced in East Pakistan seems less than likely. Indeed, as we have seen, the remarkable increase in rice production in the East Wing which appears in the official statistics seems difficult to explain.

Land reform, which has failed to meet targets consistently in the past, is once again set with ambitious targets. There seems little possibility that the standards of minimum holdings can even be approximated. The Plan states that in East Pakistan the minimum subsistence holdings should be from three to eight acres, depending on the quality of soil and water availability. However, East Pakistan has an agricultural population of at least fifty million persons on a total of 22 million cultivated acres. The latter would provide only a total 7.3 million three acre plots if the land were equally distributed. That would mean nearly seven persons per plot. Seven persons per family may not be an unreasonable assumption for rural families in East Pakistan, but the assumption of equal distribution which is required to make the arable land go around is not only violently inconsistent with the known facts, but also with the stated ceiling on ownership (500 acres of irrigated land).

The same sort of arithmetic can be applied, with the same conclusion, in West Pakistan. The West Wing subsistence

minimum is set at a range of 12.5 to 16 acres. But the Plan tells us that there are twelve million farmers in West Pakistan on only 41 million acres of arable land, giving an average holding of only a little more than five acres. Consolidation of holdings, combined with cooperative farming, if enthusiastically pursued, might make the land-holding goals less remote. The pace of that program in Pakistan is slow, however, and seems unlikely to prevent increased fragmentation of holdings in the near future, despite the legal sanctions.

The hope for agriculture in Pakistan is based upon several encouraging factors: (1) the remarkably rapid development in West Pakistan of ground water by both private and public agents, (2) the anticipated increase in the availability of surface water as the canal system is improved, (3) the Public Works program, and (4) the government commitment to meet all demand for fertilizer at subsidized prices. The remaining discussion will concentrate on (1) and (3), slighting the others for lack of space.

The development of groundwater in West Pakistan, particularly by private entrepreneurs, has been quite as spectacular as the dynamism of private industrial entrepreneurs. During the Second Plan period, private installation of tubewells accelerated so rapidly that many informed observers were taken quite unaware. By the end of the Plan period, private installations were going in at the rate of 6500 per annum; and estimates of private tubewells operating in West Pakistan in 1965 run as high as 32,000.^{25/} These wells are estimated to have provided 4.7 million acre feet of irrigation water, and to have contributed about half of the increase in productivity of the second plan period in the West Wing.^{26/}

This burst of activity in mining the vast aquifer underlying the Indus Plain has by no means exhausted itself, and, given adequate public policy to allow it, it can be expected to continue, or even to accelerate in the Third Plan period.

Ultimate groundwater potential is estimated^{27/} to be as high as forty million acre feet, while not more than eight million are now accessible with public and private well capacity combined. An additional 40,000 private tubewells plus nearly 12,000 new public wells will (if estimates and plans are realized) provide more than seventeen million acre feet during the Third Plan period. This improvement, combined with the probable surface water increase, could yield as much as a 32 per cent increase in "field availability" of water by the end of the Third Plan period.^{28/}

In spite of the fact that only half of the planned allocation for the Public Works programme was actually utilized during the Second Plan period, its success, in East Pakistan particularly, has led the planners to call for a program outlay in the Third Plan period which is more than three times the size of that realized in the earlier period (Rs. 2500 million are to be expended). The importance of this program may be understated by the size of that outlay, which is less than five per cent of total development outlays. Given estimates of overt and seasonal unemployment in excess of twenty per cent of the total labor supply, efforts to utilize this largely untapped potential in creating capital (largely in the form of roads and earthworks) seems eminently desirable. Not only is the increased employment socially desirable, but the improvement in transportation and water control facilities may very well be crucial. East Pakistan's flood control problems and West Pakistan's drainage problems are obvious candidates for experimentation with labor intensive techniques. Supported as they are by the inflation cushion of P.L. 480 imports, the Public Works programmes already, in their short history, appear to have made a contribution to agricultural productivity, without serious agricultural price increases.^{29/}

In sum, agriculture, particularly in West Pakistan, shows promise of fulfilling the planners hopes. The hazards

are manifold, however, and too little is being done in a co-ordinated way to counteract (a) waterlogging and salinity in the Indus Plain, (b) flooding in East Pakistan, (c) the unseasonality of water supply in East Pakistan, (d) the low level of technical training in agriculture, and (e) further fragmentation of agricultural plots of uneconomic size. Quite conceivably, a greater concentration of resources in these areas could yield substantial net dividends.

d) The Balance of Payments^{30/}

Pakistan's goals in international trade and finance are ambitious in the Second Plan period, foreign exchange earnings were Rs. 13,252 million.^{31/} They are planned at Rs.20,000 for the next five years. At the same time, foreign exchange requirements are to grow (absolutely speaking) even more than earnings. Total international payments by Pakistan during the Second Plan period were an estimated Rs.21,260 millions.^{32/} In the Third Plan period they are expected by the planners to be Rs. 35,500 million.^{33/} The Government of Pakistan has chosen to attempt to close the widening gap by increasing both export earnings and foreign assistance. However, the Plan strategy calls for an acceleration of Pakistan's own earnings to a rate of growth greater than that of foreign aid, so as to end the plan period with a reduced proportional weight of reliance on other nations.

The Third Plan document chooses to put the Balance of Payments problems in a favourable light. The Plan states:

"One of the outstanding features of the Second Plan has been its success in stabilizing and improving the balance of payments situation in the country. Export earnings have been higher than the Plan estimate, import requirements have been less than originally projected and the country has been able to exceed the investment targets of the Plan without requiring as much external assistance as was anticipated earlier. This improvement must be consolidated and accelerated during the Third Plan".^{34/}

This is a remarkable statement because of what it fails to say. Although it is true that the Second Plan exceeded

balance of payments goals, the goals themselves were modest. The performance of the international sector of the economy over the past five years cannot be considered one of improvement in any more relevant sense. The gap between the country's foreign exchange earnings and payments for imports grew, both in absolute terms, and as a proportion of Gross National Product. In the Third Plan period, the absolute growth of the gap will continue, but as a proportion of GNP it will, if the Plan succeeds in this respect, fall back to the proportion which obtained at the outset of the Second Plan period, or slightly less than that.

The basic requirement of this strategy is that the volume and value of exports be markedly increased absolutely, and relative to total output. The targets chosen require a compound annual growth rate for exports of approximately nine and one-half per cent, as compared to a projected GNP goal of six and one-half per cent for the same period. At the same time, smaller proportions of total foreign earnings are to be derived from exports of the traditional primary goods, raw cotton and raw jute, in particular. This places a heavy burden on the rapidly growing manufacturing sector. It calls for an increase in that sector's export earnings of 145 per cent over the plan period, or nearly twenty per cent per annum.^{35/}

In view of Second Plan performance, this seems to be overly ambitious. The Second Plan rate of growth of export earnings exceeded the target primarily because of a sudden recovery in cotton exports in 1962/63 and because of the continuation of the rapid growth of earnings from invisibles. In no year other than 1962/63 did merchandise export growth reach the achieved overall Plan period average; and only twice was the Second Plan's growth rate goal exceeded.^{36/} These uncertain fluctuations suggest that the Second Plan performance in exports is an extremely shaky base from which

to project--and particularly shaky for projecting an acceleration. The manufacturing sector was not able to increase exports as a proportion of output in the Second Plan period; on the contrary there appears to have been negative import substitution in recent years in that area. More hope may be gained from further expansion of exports of cotton and cotton manufactures, as the agricultural boom in the former Punjab makes itself felt.

Curtailment of the rate of growth of imports must be even more drastic than the export push, if this Plan's targets are to be met. International payments grew by almost sixteen per cent per annum over the past five years, while the Plan calls for less than half that rate over the next five. The cut is to be particularly marked in the import of "development imports" (mainly capital goods), even though the plan calls for an overall rise in the capital-output ratio. It seems doubtful that this goal can be consistent with a further acceleration in the rate of growth of large-scale manufacturing (from thirteen per cent per annum to fifteen per cent or more).

According to the Plan, import requirements were estimated using input-output analysis, although it concedes that the projected requirements "have been adjusted on the basis of targets of import substitution". Given the anticipated expansion of industrial output vis-a-vis other sectors, one would expect linear projections to yield rising import requirements--probably even with substantial import substitution taken into consideration. Investigation discloses that the model used was in fact not linear, due to aggregation of sectors of changing composition, and that it yields declining import growth rates net of substitution. Substitution lowers these rates still further, and it is conceded within the Planning Commission that the assumptions of the Plan document concerning import substitution are arbitrary and probably unrealistic,

particularly in capital goods. The entire exercise seems biased on the optimistic side and should be carefully re-examined before any heavy reliance is placed on the projections in policy-making.

The policies which are expected to induce the improvements described are not dramatic changes from the past, although the shift in performance called for would seem to demand it. Commercial policy in recent years has been liberalized as much as limits of foreign exchange would allow. Substantial increases in "commodity aid" (which is used primarily to import raw materials and spare parts) have been utilized to establish a "free list" of imports, for which there are ostensibly no restrictions. Other aspects of the complex foreign exchange licensing system have been streamlined and simplified to make importation easier, as well. Much of this liberalization has been directly connected with export promotion, thus building a kind of circularity into commercial policy. Unfortunately, its impact on imports seems to have been significantly greater than on exports; hence the continued widening of the trade gap. The Plan's expressed satisfaction with these policies^{37/} suggests an unawareness of the need for fairly strong measures that go with the ambitious balance of payments goals.

Freer imports of manufacturing inputs do appear to have induced better capacity utilization, particularly in the metal-using industries. However, they have apparently^{38/} been unable to bring the premium on foreign exchange down to a neighborhood of market equilibrium, as desired. To succeed in this aim, imports plus domestic production would have to be increased at a rate greater than the rapid rise of total demand--a treadmill operation.

Tariff protection of domestic industry, particularly producers of consumer goods, remains very high, despite evidence of extreme and general inefficiency.^{39/} The Plan's proposal to extend this high implicit subsidy to intermediate and

capital goods industries, despite an already high profit rate in this area, seems ill-advised. Industrialization by subsidization should have its limits, infant industries arguments notwithstanding. In sum, commercial policy in Pakistan appears to be inadequate to meet the tasks set for it.

At the time of this writing, Pakistan's foreign aid picture is seriously clouded by a diplomatic crisis over the postponement of this year's meeting of the Aid-to-Pakistan Consortium. Given the Plan strategy, settlement of that crisis is essential, for a large and consistent flow of foreign economic assistance is central to the Plan. It is estimated that external resource requirements will be Rs.15,500 million, or thirty-two per cent of the "total resources" (i.e., resources for development purposes) expected to be utilized during the Plan period. This is an understatement, incidentally, for aid for the Indus Basin works and Public Law 480 imports (U.S. surpluses) are excluded from the accounting. All things included, external resources become more important than either private or public domestic sources of development expenditure for the Third Plan period. Total aid must average nearly \$800 million per year, or more than \$7 per capita.

Although the plan concedes great dependence on aid, it may have understated requirements, as already suggested implicitly in our discussion of export earnings and import requirements, above. Furthermore, the phasing of aid utilization in the plan calls for a slowdown in utilization, though recent experience shows a very marked increase. The Plan does not take account of the normal increase in utilization as projects mature, but a check of its projection phasing pattern shows it to be inconsistent with recent performance.

The Plan's discussion of the balance of payments and internal resources treats the entire problem as though the two wings of this geographically divided nation were one.

This is a serious flaw, for East Pakistan, with very considerable foreign exchange earning capability, receives (and apparently can absorb) much less than half of the total supply of foreign resources, while West Pakistan, with insufficient capacity to earn what she needs in the way of foreign exchange, takes the larger share. Inter-wing parity is a stated goal, but the means of its achievement in the international sector are not sketched for us beyond the most general statements of intention to favor the East Wing with investment policy--which presumably implies a rising share of the nation's total imports. On the other hand, the West is the industrial Wing, and should exports of manufactures be increased as planned, balance on the West side should be a much nearer goal by 1970. Our reservations on that matter, however, have already been stated.

IV. Human Resources.

a) Educational Objectives

The planners have recognized that education is "a vital national investment and a major determinant of the Nation's economic growth".^{41/} The absolute expenditure on education in the Second Plan was nearly five times larger than in the First, and it is anticipated that expenditure will increase by 2 1/2 times again during the Third Plan. On the surface this is an encouraging development. On the other hand, although the proportionate expenditure on education in the Third Plan is higher than in the Second, it is not as high as it was in the First Plan and is no higher than it was in the Pre-Plan period (1950-55).

TABLE IX

RELATIVE AND ABSOLUTE EXPENDITURE ON EDUCATION

	<u>Rs. Million</u>	<u>As percentage of Development Expenditure</u>
Pre-Plan (1950-55)		5
First Plan (1955-60)	230	6
Second Plan (1960-65)	1102	4
Third Plan (1965-70)	2730	5

Source: Col (1): Third Plan, p.219;

Col (2): Ibid, p. 49

Moreover, even in absolute terms the annual per capita expenditure on education during the Third Plan will only be about Rs. 5! According to the latest census there were roughly 24.5 million children between the ages of 5 and 14 in 1961.^{42/} At the same time only 4.3 million children were enrolled in schools.^{43/} That is, less than 1/5 of the children of school age were actually registered at educational institutions. Even this figure may be an overestimate, however, as there is reason to believe that schools inflate the number of students enrolled in order to receive higher grants or attract more students.

Approximately 85 percent of the population is illiterate. This high proportion is attributable not only to an insufficiency of educational facilities but also to their low quality. As a result of the latter the drop-out rate is very high and the number of students in secondary schools is less than 30 percent of the number enrolled in primary schools. Evidently there are many children who are poorly trained and who are functionally illiterate even though they may not be so classified in census data. The planners' intention "to reduce the rate of drop-out by improving the quality of education offered" constitutes official recognition of this problem.^{44/}

The plan's strategy for education was prepared without the aid of a detailed manpower survey. Thus the educational authorities did not know the number of trained persons in various categories which exists, the extent of present shortages in these categories, nor even future requirements. One would have thought that such information would have been generated after ten years of planning, but it was not. Manpower surveys, however, now are reported to be underway.

Due to this lack of basic data the educational programme necessarily reflects the a priori views of the planners and any fragmentary evidence which is available, including information from other countries.^{45/} These factors apparently led them to believe that "the keynote of the Third Plan" should be "quality education".^{46/} This priority apparently reflects official concern about the widely acknowledged deterioration of the educational system in Pakistan since independence. In addition they are concerned with "widening the base of primary education and greatly increasing the facilities for technical and vocational education."^{47/}

An examination of the proportional distribution of expenditure among the various educational categories is one (fairly crude) method of checking whether resource allocation reflects the stated plan priorities.

TABLE X
RELATIVE PRIORITIES OF VARIOUS LEVELS OF EDUCATIONAL EXPENDITURE (in percentages)

	<u>First Plan</u>	<u>Second Plan</u>	<u>Third Plan</u>
Primary education	20	9	20
Secondary education	19	17	23
Higher education	26	25	15
Technical education	6	24	23
Teacher education	2	6	5
Scholarships	1	8	8
Miscellaneous	26	11	6
	<hr/>	<hr/>	<hr/>
	100	100	100

Source: Third Five Year Plan, p. 219

The most direct source of qualitative improvements would be through (a) curriculum reforms, (b) the provision of more and better teachers, and (c) the adoption of procedures which enable the most talented students to advance to higher levels. With respect to (a) the Plan admits that "secondary education is in need of fundamental reorientation of its curriculum" and advocates a special emphasis, at all levels, on science and mathematics. If these curriculum reforms are in fact introduced there is little doubt that the quality of the existing educational system would improve. The data in Table X, on the other hand, appear to indicate that teacher training has a slightly lower priority in the Third Plan than it enjoyed in the Second--although the absolute expenditure has nearly doubled because the total education budget is so much larger. Similarly, the proportional allocation to scholarships--the third source of a rise in quality--is unchanged from the Second Plan. Thus the overall impression one has from these data on anticipated expenditure is that there has been no special emphasis on quality education within the Third Plan, i.e., in this respect there

does not appear to have been a pronounced shift of strategy.

In comparison with the Second Plan the priority assigned to primary education^{48/} (as well as secondary education) has greatly increased. This appears to have come at the expense of expenditure on higher education and is to be welcomed.^{49/} It should be noted, however, that the proportion allocated to primary schooling in the Third Plan is identical to that allocated in the First, and hence primary education has only been restored to the relative importance it previously enjoyed. Finally, expenditure on technical education is relatively lower in the Third Plan than in the Second and its decline of one percentage point would appear to be inconsistent with the stated priorities.

The analysis so far has remained within the context of the stated objectives and expenditure allocations of the Plan. The strategy itself has not been questioned. Yet one cannot help but feel that in a country where over 85 percent of the population lives in rural areas and where nearly 50 percent of the output is generated in agriculture top priority ought to be assigned to agricultural training. The needs for skilled labour and professional manpower in the urban sector constitute a very small fraction of the work force. The need for trained farmers, however, is immense. An adequate scheme of rural education would greatly facilitate --if it is not an essential requirement for--the success of any development programme which hopes to transform the countryside by, say, introducing unconventional inputs and creating new rural institutions and land tenure relationships.

In Pakistan there is a "pronounced hiatus" between the educational facilities available in the urban and rural communities.^{50/} In fact, agricultural education has been almost completely neglected. In 1960-61 there were only 2402 students studying agriculture in the whole of Pakistan.^{51/} This represented only .04 per cent of the entire students population

or 1.6 per cent of the students above the secondary level. This neglect is perpetuated in the Third Plan. Only one paragraph in the document is devoted to rural education. This is found under Section G of the "Miscellaneous" category-- after Section E--Physical Education and Section F--Juvenile Literature.

In summary, it appears that (i) total expenditure on education is inadequate, (ii) the allocation of expenditure within the various educational categories does not closely reflect the stated plan priorities, and (iii) the priorities are not appropriate to the needs for social and economic development in Pakistan. A great more emphasis should be placed on rural education. The educational programme is one of the most glaring weaknesses of the Third Five Year Plan and raises serious questions about the ability of the economy to achieve the global objectives set for it.

b) Manpower and Employment

Labor force data in Pakistan are largely speculative. The 1964/65 Pakistan Economic Survey devotes a scant two paragraphs to manpower planning, a fair proportion of the space being occupied by the following statement: "There are no adequate and consistent statistical series available on the labour force and employment for analysis of changes in trends" ^{52/}

In spite of this lack of information, the Third Five Year Plan and the Evaluation of the Second Plan conclude that manpower utilization in the Second Plan period did not do better than to keep pace with the growth of the labour force, although the arithmetic of growth would suggest that they have most likely done better than that.

An economy growing at an overall rate of 5.2 per cent per annum with a population growth rate of something on the order of 2.6 per cent per annum ^{53/} should be generating jobs more rapidly than the rate at which new persons enter the

labor force. If we assume that the participation rate changed very little over the Plan period,^{54/} keeping even on employment would imply a labor productivity increase of 2.6 per cent per annum. Even though high rates of growth in productivity are quite plausible, given the very low base, it seems unlikely that Pakistan would outstrip the United States in this regard, as these figures imply.^{55/} If, on the other hand this apparent phenomenon is real, the country's growth strategy should be carefully examined to see whether or not it is sufficiently labor intensive at the margin.

The projections for the Third Plan raise the same questions, with greater force. The Plan's labor force data are reproduced in Table XI. As the table shows, the planners expect the supply of manpower to grow by only 4.2 million man years, or thirteen per cent overall. Population, according to the most conservative estimates, will grow by more than thirteen per cent, and, if anything, the participation rate should increase, given the youth of the community. Hence an increase of man years supplied of 5.6 to 6.0 million would not seem implausible. However, the Plan promises to provide only 5.5 million man years of new employment, despite a projected overall production growth rate of 6.5 per cent, an assumed population growth rate of only 2.6 per cent per annum, and an implicit decline in the participation rate. The implied productivity increase is more than 2.9 per cent per annum!

Of course "productivity" change measured in this way is nothing more than a reflection of the change in the output-labor ratio, and may simply be a result of (a) poor labor statistics (which we know we have) and/or (b) rise in the capital-output ratio (which the Plan predicts).^{56/} Some increase in the overall efficiency of production (i.e., output per unit of input), particularly in agriculture, is also quite plausible. Insofar as the shift is real and not illusory (i.e. due to poor data), it is to be hoped that it reflects

TABLE XI

LABOR FORCE, 1965 and 1970
(million manyears)

	<u>1965</u>	<u>1970</u>	<u>Increase during Third Plan</u>
East Pakistan	21.0	23.6	2.6
West Pakistan	<u>16.2</u>	<u>17.8</u>	<u>1.6</u>
Total	37.2	41.4	4.2

Source: Third Five Year Plan, p. 222

greater returns directly attributable to labor inputs rather than substitution of capital inputs for labor inputs. Given the pattern of investment allocation and of subsidy, one fears, however, that the latter has been the case to an extent which is undesirable economically in a labor surplus economy.

It is particularly disturbing to note that only 2.5 million manyears of employment are to be created in the agricultural sector.^{57/} The rural population of Pakistan will grow, in the Third Plan period, by approximately thirteen million persons.^{58/} Assuming, conservatively, a participation rate in the rural sector of thirty-two per cent, the rural labor force will grow by 4.2 million (equal to the Plan's estimated total labor force increase). This would increase rural unemployment by 1.7 manyears--minus whatever increase in non-agricultural employment takes place in rural areas.

The same calculations applied to the urban sector show that the remaining (non-agricultural) jobs which are to be created will be more than enough to take care of the projected urban labor force. The net reduction in urban unemployment would be on the order of 300,000, while there would be a net overall increase in unemployment (or underutilization) of 1.4 million manyears.

TABLE XII

PROJECTIONS OF SECTORAL CHANGES IN THE LABOR FORCE
1965-70, AND THIRD PLAN ESTIMATES OF MANPOWER
REQUIREMENTS
(millions)

(1) Sector	(2) Population 1965 1970		(3) Population Growth 1965-70	(4) Labor Force Growth ^{a/}	(5) 3rd Plan Require- ments	(6) Balance (4)-(5)
Rural	96.1	108.7	12.6	4.2	2.5	-1.7
Urban	15.9	21.3	5.4	1.7	2.0	0.3

a/ assuming 32 per cent participation rate in both sectors

Source: Population: totals are from estimate for 1963/64 in Pakistan Economic Survey, p.2 projected at 2.6 per cent to 1965, and at 3.0 per cent to 1970.

Sector totals: calculated by applying linear projections of inter-censal changes in the proportions in the two sectors. See Ibid, Statistical Appendix Table 3.

This pessimistic conclusion can be modified, however, if more realistic assumptions about manpower requirements are made than those in the Plan. If no more than two per cent of the 6.5 per cent per annum Third Plan growth rate were to be accounted for by the rise of the output-labor ratio, 4.5 per cent would remain as job-creating growth. Given constant or gently changing participation ratios, then, the (roughly) 3.0 per cent per annum growth of the labor force would be absorbed and an additional 1.5 per cent of the labor force would be in demand. The latter would be cumulative and growing increment, so that by 1970 (assuming the Plan's 1965 labor force figure of 37.2 million to be correct, total demand for labor will have increased by 9.2 million, while the labor force will have increased by 5.9 million. Thus, 3.3 million additional man-years of employment demand will have been created. This, in turn, would mean a reduction in the reservoir of unemployment and underemployment by 44 per cent-- labor mobility permitting.^{59/}

The Plan states^{60/} that it would take a great effort at labor intensification to bring about a better performance than the creation of 5.5 million additional man-years of jobs.

However, projections assume a continued decline in the ratio of labor to output, at a vigorous rate--although it may involve a slowing down of the rate of substitution of non-labor for labor inputs. Surely the latter is within the power of economic policy, without there being any need for "an intensive research programme to develop non-western labor intensive production techniques", ^{61/} however valuable such a program might be. Given the capital deepening which the Plan implicitly intends, the modest target for reduction of unemployment will probably not be met. This is primarily because the assumed rate of growth of the labor force is very low, and secondly because the output goals may be overly optimistic.

The preceding discussion has focussed entirely on the quite crude considerations of macroeconomic manpower demand. Quality of manpower is at least as important as quantity. Productivity increases that stem from improved skill and training are complementary and not competitive in making labor employable. ^{62/} Although the Plan is able to list a large number of training institutions, it is generally accepted as a fact that far too little in the way of resources for development of human resource is being allocated. As our discussion in section IV-a has shown, this shortcoming is particularly pronounced in the rural area--where labor underutilization is most serious. Surely the Soviet and Chinese example of widespread basic training in industrial and agricultural technology deserves emulation in Pakistan, where rudimentary expertise in production is such a scarce commodity.

c) Family Planning

According to the Plan the population of Pakistan is about 112 million, ^{63/} 45 percent of whom are below fifteen years of age. The current birth rate is 55 per 1000 and the death rate is thought to be about 29. If the latter figure is correct the population is growing at 2.6 per cent per annum. Many demographers, however, believe the growth rate is higher, viz.,

about 3 per cent. According to the Perspective Plan the mortality rate is expected to decline to about 15 per 1000 by 1985. If, meanwhile, the fertility rate remains unchanged the rate of growth of population will accelerate to 4 per cent per annum. This is the spectre that haunts the nation.

To prevent an expanding population from literally eating up all the projected increase in output the Government has begun an ambitious birth control programme. The objective of the programme is to reduce the birth rate from 55 to 35 per 1000 by 1985. The population projections of the Perspective Plan visualize an accelerating growth rate through 1970-75 from 2.6 per cent per annum to 2.8 per cent and then a sharp deceleration to 2.1 per cent during 1980-85.

The family planning programme so far has been a disappointment. Only Rs. 500 thousand were allocated to family planning in the First Plan. The amount was increased to Rs. 30.5 million in the Second, but only half the allocation was actually spent. The programme has just been reorganized, however, and a Family Planning Commissioner in charge of a Division in the Ministry of Health, Labour and Social Welfare has been established. The work of the Commissioner has the active support of the President.

The specific target of the Third Five Year Plan is going to be very difficult to achieve--viz., to reduce the birth rate by 10 per 1000. Rs. 166 million have been allocated to achieve this.

Both the intra-uterine devices (I.U.D.) as well as traditional contraceptives (condoms, foam tablets, diaphragms, etc.) will be supplied and sold at highly subsidized prices. Major emphasis, however, will be placed on the former as the I.U.D.'s are cheaper, simpler and more effective. One would have thought, in fact, that the traditional contraceptives could be neglected entirely. This would both simplify the organization of the programme and save money.

A prominent feature of the family planning scheme in Pakistan "is the monetary incentive it offers both to those who practice contraception and to the personnel who propagate it"^{64/} For each vasectomy both the doctor and the client will be paid Rs. 25. "Insertion of I.U.D.'s will be free for the client. For each insertion doctors will be paid Rs. 8/- and trained nurses/midwives/"dais" Rs. 4/-. Besides, "dais" will be paid Rs. 2.50 and others Rs. 2 for referring cases leading to insertion. Contraceptives will be sold at subsidized rates and 50 per cent of the sales proceeds will go as commission to the sellers".^{65/} Quite clearly, those who participate in the programme are given a very strong financial incentive to work for its success.

V. Conclusion

Optimism in proper dosage is good medicine for a developing nation such as Pakistan. The preceding discussion suggests, however, that the Planning Commission has been too much influenced by the good fortune of the middle years of the Second Plan period and has generated optimistic growth goals for the next five years largely through extrapolation of growth acceleration. There is no doubt that there is growth impetus in the economy, but the assumption that its acceleration will continue without policy shifts in almost all areas seems unwarranted.

The power of the State's fiscal system seems seriously under-utilized, and only very mild strengthening in this area is proposed. The private corporate entrepreneur is to be relied upon to generate the largest part of a very high marginal rate of saving--as well as to generate the largest part of the increase in exportable surplus; this even while reducing his import requirements drastically. Clearly too much reliance is being placed on the small, quite inefficient (though admittedly dynamic) industrial sector.

The dynamism of that sector is not being purchased without a price. The price is a very large inflow of largely foreign and East Wing financial capital goods (imported at favourable prices due to currency over-valuation), which are being used to produce goods sold at prices very far above world market prices. The profits thus generated have been largely re-invested (most estimates range from sixty per cent to seventy-five per cent). The economic value of that reinvestment, however, is largely unquestioned, in terms of its net contribution to social value added, its impact on the distribution of income, or on employment.

Agriculture, on the other hand, as is so frequently the case, is a poor, relatively unspectacular cousin. Pakistani farmers have made a substantial contribution to the nation's growth, and appear to have the potential for much more. If agricultural exporters received something approaching the scarcity value of the foreign exchange they earn, and if industrial entrepreneurs were required to pay something approaching the scarcity value of the foreign exchange which they use, the balance of the growth pattern would be shifted in a direction which, in our opinion, would be most healthy, particularly if accompanied by strengthening of the fiscal system.

A larger effort for the rural community, in general, seems called for. West Pakistan, in particular, has great agricultural growth potential. It seems obvious that the time must come when relatively well-endowed West Pakistan will produce a surplus of resources which can be transferred to the underprivileged East Wing--rather than the other way around, as is now the case. This can probably not be accomplished by investing foreign exchange earned by East Pakistani farmers in industrial complexes in West Pakistan. Industry is a net foreign exchange user, and will most likely continue to be, in spite of the Plan's optimistic predictions. Foreign aid

can keep this process going in the short run, but in the longer run the surplus which agriculture can produce must be developed and tapped for productive investment.

Still, agriculture's value is reflected in the Plan allocations, even if imperfectly. The great and obvious shortcoming of the Plan is the inadequacy of its provision for the development of human resources. Education in Pakistan is in a very bad state, by everyone's admission, both quantitatively and (perhaps more seriously) qualitatively. The nation needs thousands of young people who understand basic technology--in both agriculture and industry, particularly the former. Even so, the nation resists education reform with amazing stubbornness. Surely no type of investment deserves higher priority.

Family planning seems to be on the verge of being given a major boost. It, too, is sorely needed, for the most recent estimates of rates of natural growth are frighteningly high. Also, the planned expansion of the Public Works Programme is a most encouraging development. It should be pushed with great vigor, taking fullest advantage of the availability of U.S. agricultural surpluses.

Pakistan's Third Plan could succeed if appropriate measures were taken to insure it. The Plan document, as it exists, however, appears too weak as a statement of economic policy to make the present authors optimistic for the degree of success which the planners predict.

Karachi

August, 1965.

FOOTNOTES

- 1/ Government of Pakistan, The Third Five Year Plan (1965-70) May 1965, p.33 (henceforth this document will be referred to as Third Plan)
- 2/ Ibid, p. 34
- 3/ $\frac{\Delta T}{\Delta Y} = \frac{\left(\frac{T}{Y}\right) \left(\frac{\Delta T}{T}\right)}{\frac{\Delta Y}{Y}}$ Where T and Y stand for government revenue and GNP respectively. Similarly, these projections imply a total elasticity of the tax system (including tax changes) of about 1.9.
- 4/ $\alpha_t \left(\frac{\Delta T}{\Delta Y}\right) = 40 \times 203 = 8.1$ where α_t = the marginal propensity to save out of taxes.
- 5/ Lewis, S.R. and Khan, M.I., "Estimates of Noncorporate Private Saving in Pakistan: 1949-1962," Pakistan Development Review, Vol. IV, No.1 Spring 1964.
- 6/ Hasan, S., "Some Problems of Perspective Planning in Pakistan", Pakistan Development Review, Vol. IV, No. 2 Summer 1964, p.197.
- 7/ Ibid.
- 8/ Third Plan, p.33
- 9/ Griffin, K.B., "Financing Development Plans in Pakistan", forthcoming in Pakistan Development Review, Vol. V, No. 4, Winter, 1965.
- 10/ Third Plan, p. 29.
- 11/ Ibid. p. 133
- 12/ Ibid. p. 474.
- 13/ Ibid. p. 466.
- 14/ Ibid. p. 468
- 15/ Tims, W., "Industrial Growth during the Third Plan" Planning Commission July, 1965, (cyclostyled), p.1.
- 16/ Ibid.
- 17/ The comparative growth rates are (in per cent per annum)
- | | <u>Second Plan</u> | <u>Third Plan</u> |
|----------------------|--------------------|-------------------|
| CNP | 5.2 | 6.5 |
| Manufacturing output | 8.6 | 10.0 |
- Source: Third Plan, Ch. I.
- 18/ Soligo, R. and Stern. J., "A Study of the Export Bonus Scheme," Karachi 1965, (unpublished).
- 19/ It should be noted, however, that agriculture and industry combined barely managed to out-perform the residual "services" sector in this respect.
- 20/ An earlier version of the Plan anticipated a 5.5 per cent growth rate, but a quite arbitrary reduction was introduced very late in the game.

- 21/ Probably the 3.5 per cent agricultural growth rate of the Second Plan period exceeded the natural increase of population by some margin, as the Plan document says, but given doubts about the accelerating population growth rate, the state of the race is not clear.
- 22/ Third Plan, p.41.
- 23/ Ibid, p. 129.
- 24/ Falcon, W.P. and Gotsch, C., "Agriculture in West Pakistan: An analysis of Past Progress and Future Prospects," Planning Commission, Karachi, December 27, 1964, (unpublished).
- 25/ Ibid, p.10 and Mohammad, G., "Private Tubewell Development and Cropping Patterns in West Pakistan", Pakistan Development Review, Vol. V, No. 1, Spring 1965.
- 26/ Falcon, W.P. and Gotsch, C., op.cit.
- 27/ Third Plan, p.296
- 28/ Falcon, W.P. and Gotsch, C., op.cit.
- 29/ Gilbert R., "The Works Programme in East Pakistan" International Labour Review, March, 1964.
- 30/ This section draws heavily upon Glassburner, Bruce, "The Balance of Payments and External Resources in Pakistan's Third Five Year Plan," Pakistan Development Review, Vol. V No. 3 Autumn 1965.
- 31/ Third Plan, p. 96.
- 32/ Ibid.
- 33/ Ibid, p. 98
- 34/ Ibid, p. 79
- 35/ Ibid, p. 84
- 36/ Government of Pakistan, Ministry of Finance, Pakistan Economic Survey, 1964-65, 1965 p.74. Henceforth referred to as Survey.
- 37/ Third Plan, p. 89.
- 38/ Glassburner, Bruce, op.cit.
- 39/ Soligo, R. and Stern, J., "Tariff Protection. Import Substitution and Investment Efficiency," Pakistan Development Review, Vol. V, No.2, Summer 1965.
- 40/ Glassburner, Bruce, op.cit.
- 41/ Third Plan, p.189.
- 42/ Government of Pakistan, Census of Pakistan, 1961.
- 43/ Jillani, M.S. "Changes in Levels of Educational Attainment in Pakistan: 1951-1961," Pakistan Development Review" Vol. IV, No. 1, Spring 1964, p.86.
- 44/ Third Plan, p. 193

- 45/ Third Plan, pp. 224-225
- 46/ Ibid, p. 191
- 47/ Ibid.
- 48/ Two of the objectives of the Third Plan are to construct 108,500 primary schools and to improve 47,600 others. If one divides the total expenditure of Rs. 520 million allocated to primary education by the former figure, the absolute maximum that can be spent per primary school building consistent with these restraints turns out to be Rs. 4703. It is highly doubtful that the average primary school can be constructed for this amount, let alone be equipped with books, tables, chairs, blackboards, and a teacher. How one can expect to provide "quality education" with such an expenditure is beyond our comprehension.
- 49/ Higher education needs strengthening, of course. The relative need is greater at the primary and intermediate levels, however.
- 50/ Third Plan, p.215.
- 51/ Jillani, M.S., op.cit., p.88
- 52/ Survey, p. 232
- 53/ This is probably a conservative estimate of the Second Plan period rate.
- 54/ An assumption which is consistent with such data and projections as exist.
- 55/ The secular rate of productivity growth in the U.S. is approximately 2.2 per cent per annum.
- 56/ $\frac{Y}{L} = \frac{K}{L} \cdot \frac{L}{Y}$, where Y is GNP, L the value of labor inputs, and K is the value of capital inputs. A rising capital output ratio may be symptomatic of a rise in K and a fall in L (absolute or relative). This shift in factor proportions, even with constant Y, would cause a rise in Y/L, the "average productivity of labour" without any qualitative change in labour inputs.
- 57/ Third Plan, p. 223.
- 58/ Calculated by the authors assuming a population of 112 million in 1965 and 130 million for 1970, with a linear projection of the inter-censal changes in urban-rural proportions.
- 59/ The Plan assumes total labour underutilization to be twenty per cent or 7.4 million man years in 1965. Third Plan, p. 223.
- 60/ Third Plan, p. 224
- 61/ Ibid
- 62/ And also, of course, for making additional capital employable.
- 63/ The 1961 Census shows population in that year to have been 93.7 million. If the assumed rate of growth (1.6

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