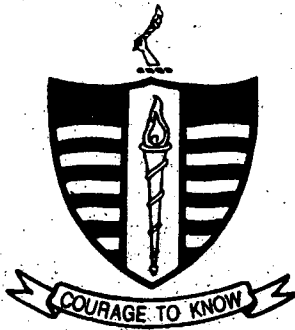


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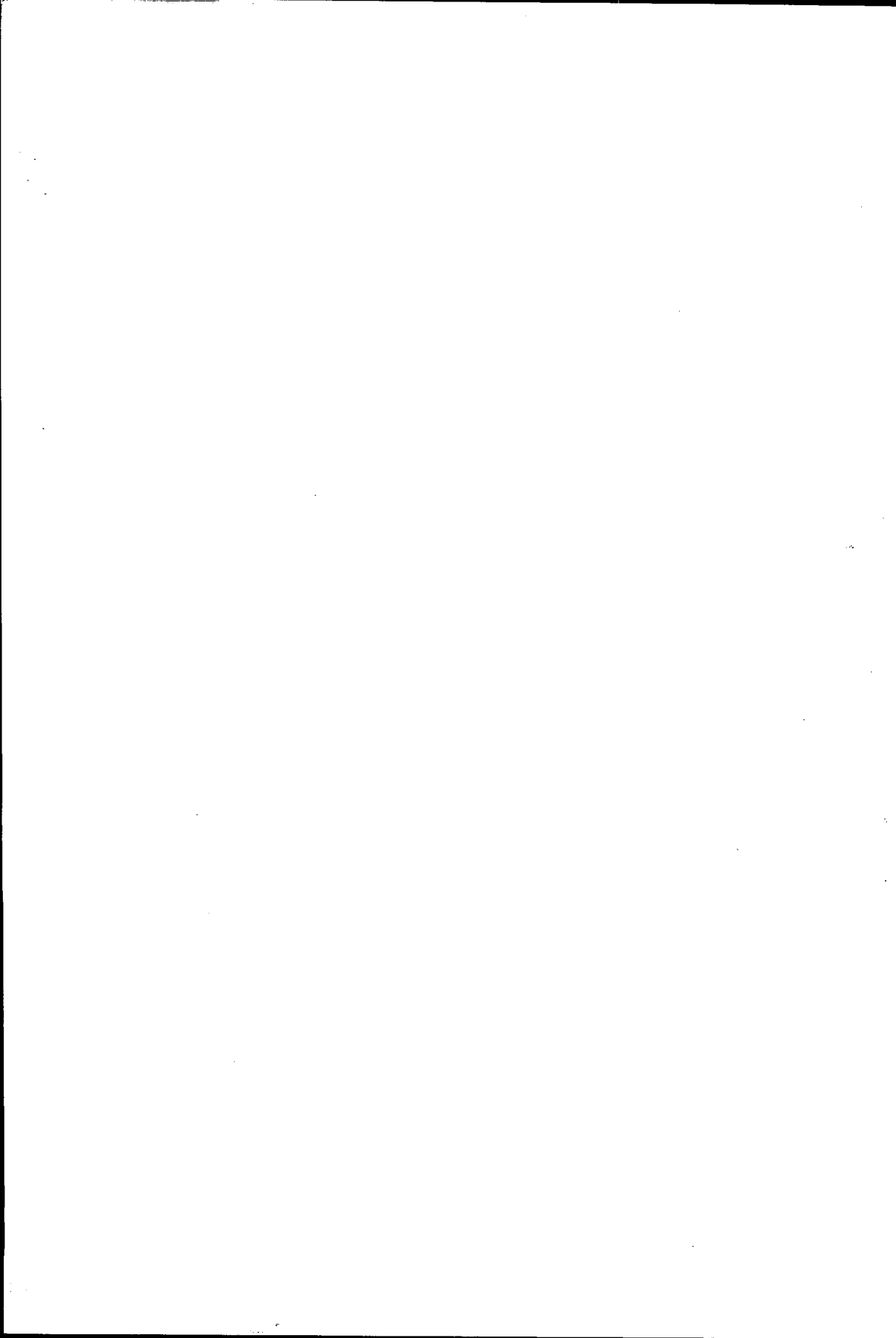
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DEPARTMENT OF ECONOMICS
GOVERNMENT COLLEGE, LAHORE - PAKISTAN



HUMAN DEVELOPMENT: MEANS AND ENDS

By

Paul Streeten*

Human development is defined in the UNDP's Human Development Reports as the enlargement of the range of people's choices. It is an extension, enlargement and deepening of the now somewhat unpopular basic needs approach. Thinking about poverty has evolved from economic growth as the performance criterion to employment, income distribution, the informal sector, and via basic needs to human development. Some basic needs interpretations have run in terms of commodity bundles or specific needs satisfactions, and it has been said that human development gets away from this. In our book First Things First (Streeten et. al. 1981) we say: "First, and most important, the basic needs concept is a reminder that the objective of the development effort is to provide all human beings with the opportunity for a full life. In the past two decades, those concerned with development have sometimes got lost in the intricacies of means...and lost sight of the end. They came near to being guilty, to borrow a term from Marx, of 'commodity fetishism'". "Opportunity" is near in meaning to Amartya Sen's "functioning" and "capability". We tried hard to get away from the detached objects people happen to possess¹ and to emphasize the end: people's full lives.

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¹Sudhir Anand and Martin Ravallion (1992) criticize the basic need approach for being still "firmly centered on commodity possession" (pp.135-136).

Amartya Sen's analysis has been in terms of "capabilities" and "functionings," and of neither satisfactions nor commodities.² Sen goes beyond the analysis of the commodities in terms of their characteristics (a shirt serves warmth and decoration, and if drip-dry saves ironing), which consumers value, and analyses the characteristics of the consumers; whether they have the capability to make use of commodities. The same amount of food has a different significance according to whether the consumer is healthy or has parasites in her stomach (in which case the basic needs of the worms rather than of the consumer are met); according to the rate of metabolism, the age, sex, size and work load of the consumer; according to the climate, according to whether she is pregnant or lactating, according to whether the consumer has acquired through education the knowledge of how to prepare the food nutritiously, and according to whether she needs the food for other uses than her own consumption, such as entertainment or ceremonies.

Sen also argues that human development cannot be judged only by end-states, and that the freedom to choose between different options is an important component of well-being. A given commodity bundle has a different significance to the consumer according to whether she has other options, though she does not exercise them, or whether that same bundle is the only one available. There is a difference between a starving pauper, a fasting monk and Gandhi on hunger strike, which is not reflected in the low calorie intake of all three. Only the starving pauper lacks capability. But Sen's capabilities cannot be observed, while achievements can. If failure of achievement is voluntary, it is acceptable. But some

²Amartya Sen, (1984, 1985, 1987).

authors (like Frances Stewart)³ have argued that it is better to separate freedom of choice and look at poverty in terms of observable achievements. In this sense, all three are deprived. Sen lumps achievement and freedom of choice together in "capability," which may or may not be exercised.

Happiness, as experienced by the individual, is not what human development can aim at or is mainly about. Not only can happiness not be delivered by the government;⁴ people may be miserably poor and yet be contented. Anita Brookner in one of her novels tells of a woman who was so modest, she did not even presume to be unhappy.⁵ And Susan Minot in her novel Folly writes "not only did she not think of making certain choices herself, she was completely unaware of having the desire to do so." Indian women report much less being ill than Indian men.⁶

Human development goes beyond basic needs in that it is concerned with all human beings, not only the poor, not only poor countries, not only basic needs. Human development applies to the advanced, industrial countries, as much as to middle-income and low-income countries.

The indicators for the advanced countries are, of course, different though, alas, to John Kenneth Galbraith's complaint about private affluence amid public squalor has been added in

³Frances Stewart (1993).

⁴Keynes proposed the toast to the Royal Economic Society: "to economics and economists, who are the trustees, not of civilization, but of the possibility of civilization."

⁵Anita Brookner (1989).

⁶In the film of Edith Wharton's The Age of Innocence Newland Archer, seeing the futility of creating a soul mate of his wife, says, "There's no point in liberating some-one who does not realize she is not free." Not everyone would agree. Against people's self-perception being above their real situation, Jodha (1988) found that people whose income had declined, felt themselves better off by criteria of independence, especially from patrons, mobility, security and self-respect.

many advanced countries that of private affluence amid private squalor. A walk through the streets of New York or London provides plenty of evidence. But once nearly 100 per cent literacy and average life expectancy of 78 years are reached, there is not much to distinguish one advanced country from another. Years of schooling have been included in the indicator for education of the Human Development Reports as a differentiating characteristic between, say, Britain and the USA.

Sudhir Anand and Amartya Sen have suggested the division of all countries into three groups; low, medium and high levels of human development.⁷ For countries with a low value of human development the basic HDI can be used to rank their performance. For countries with a medium value of human development Anand and Sen add one supplementary indicator to each of the three basic variables, life expectancy, literacy and log of GDP per head. In the longevity category they add infant and child mortality (under age 5); in the education category they add secondary school enrolment; and in the income category they add the incidence of income poverty in the country.

For countries with a high level of human development they add a further supplementary indicator to the two already existing in each category in the medium group. To the survival (longevity) category they add the maternal mortality rate; to the education category they add tertiary enrolment; and to the income category they add Gini coefficient-corrected mean national income, i.e. GDP per head multiplied by $(1-G)$. The following table illustrates the new additions.

⁷Anand and Sen (1993).

Human Development Level	Low	Medium	High
Human Development Indicators	1.1 Life expectancy	1.1 Life expectancy	1.1 Life expect.
		1.2 Under-5 mortality	1.2 Under-5 m.
			1.3 Maternal mor.
	2.1 Adult literacy	2.1 Adult literacy	2.1 Adult literacy
		2.2 Secondary School enrolment	2.2 Sec. sch. enrol.
			2.3 Tertiary enrol.
	3.1 Log of GDP per head up to international poverty line	3.1 Log of GDP	3.1 Log of GDP per head up to international poverty line
		3.2 Incidence of poverty	3.2 Incid. of pov
			3.3 Gini-corr. mean N.I.

Additional indicators of shortfalls from human development should be looked for elsewhere in the high human development countries: in homelessness, drug addiction, crime rates. Divorce rates and suicide rates are more controversial. They can be regarded as indicating more options and therefore positive achievements, particularly suicides of terminally ill elderly patients. On the other hand, they may be regarded as signs of the breakdown of the social fabric of a society, a failure of upholding what some regard as the moral values of the family or the sanctity of life.

A shorthand way of describing human development is a variation of Abraham Lincoln's definition of government. It is development of the people, for the people, by the people. Of the people implies adequate income generation through jobs and the generation of primary incomes; for the people implies social services for those who need help and the generation of

secondary incomes; and by the people means participation. It could also be interpreted as the economic, social and political dimensions of development.

The move from income to welfare or utility, to chosen bundles of goods and services, to characteristics of these goods and services, to needs that they meet, and finally to the enlargement of choices, has enriched our understanding. The enlargement of choices of one section of the community should not be at the expense of the legitimate choices of another. This has two important implications: first in equity, so that one person's enlargement does not encroach on that of others; and second over time, so that our present choices do not encroach on the choices of future generations, or what has come to be known as sustainability. This concern for the future should cover not only the physical environment -- raw material exhaustion without technical substitution and pollution -- but also resilience to outside shocks, debt, and political sustainability.

Both equity and sustainability raise complex and difficult questions, not discussed here. "To each according to his or her..." Filling in the dots is highly controversial: needs, merit, desert, contribution? Sustainability must refer to the constituents, not to the determinants of well-being. But maintaining the constituents of the well-being of future generations depends on population growth, and on changes in technology and in preferences, all uncertain.

A human development strategy stresses the importance of institutions for improving the human condition. Among these are not only the government, central and local, both as an agent to make markets work efficiently and to step in where they fail, and the market, but also the civil society and global

institutions. Civil society refers to democratic political processes, NGOs, grassroots organizations, religious and professional associations, action groups, the news media, and the public at large. It is in the interaction between the state and civil society that the conditions for the good life should be found. Global institutions are needed in order to curb the occasionally destructive and self-destructive tendencies of the state and to assert the values shared by all humanity.

The item in the UNDP's Human Development Reports (1990, 1991, 1992, 1993, and 1994) that has caught the public's eye and caused most controversy is perhaps analytically the weakest: it is the Human Development Index. It is clear that the concept of human development is much wider and richer than what can be caught in any index or set of indicators. This is true of other indicators, such as those of temperature, also. But, it might be asked, why try to catch a vector in a single number?

Yet, such indexes are useful in focusing attention and simplifying the problem. They have considerable political appeal. They have a stronger impact on the mind, draw more powerfully public attention, than a long list of many indicators, combined with a qualitative discussion. They are eye-catching. The strongest argument in their favour is that they show up the inadequacies of other indexes, such as GNP, and thereby contribute to an intellectual muscle therapy that helps us to avoid analytical cramps. They can serve as mental finger exercises. They refocus our attention from one set of items to others, in the case of the HDI to the social sectors: nutrition, education and health. But it should be remembered that human development is a much richer concept than what can be caught in any index, whether GNP or HDI.

The Human Development Index comprises (1) the logarithm of GDP per head, calculated at the real purchasing power, not at exchange rates, up to the international poverty line; (in subsequent Reports after that of 1990 this was modified in various ways); (2) literacy rates (and, since the 1991 Report, mean years of schooling); and (3) life expectancy at birth. These disparate items are brought to a common denominator by counting the distance between the best and the worst performers and thereby achieving a ranking of countries. Critics have said that not only are the weights of the three components arbitrary, but also what is excluded, and what is included.

As we have seen, one of the great drawbacks of average income per head is that it is an average that can conceal great inequalities. But, it may be objected, the components of the Human Development Index, namely life expectancy and literacy, are also averages. They can conceal vast discrepancies between men and women, boys and girls, rich and poor, urban and rural residents, different ethnic or religious groups.

The HDI has in fact been illuminatingly disaggregated by sex, region, and ethnic groups for a few countries, where data were available. The HDI has also been adjusted for sex-disparities. This is done in the following way. First, the HDI ranking is adjusted by expressing the female values of each component of the index as a percentage of the male value. These percentages are calculated separately for income, educational attainment and life expectancy and then averaged. The country's general HDI is then multiplied by this factor to yield a sex-disparity-adjusted HDI figure. This procedure makes a considerable difference to the rankings of countries. Japan moves down from 3 to 19, Canada from 1 to 9, Switzerland from 2 to 17, and Hong Kong from 22 to 30. On the other hand,

Sewden moves up from 4 to 1, Denmark from 15 to 4, Finland from 16 to 3, and New Zealand from 18 to 8.

Disaggregation by categories is also possible. Disaggregation by income groups, by residence (urban, rural), by ethnic group, by region and by continent can all be done. The Human Development Report 1993 disaggregated the HDI for a small group of countries by ethnic groups.

There are, however, several reasons why even non-disaggregated and non-sex-disparity-adjusted human indicators are less misleading than income per head.

First, the distribution of literacy and life expectancy is much less skewed than that of income. There is a maximum of 100 per cent literacy. In spite of all the achievements of modern medicine, the maximum life span has not been extended. For income, on the other hand, the sky is the limit. A very few very high income earners can raise the average. (The median or the mode would eliminate some of the distortions, but they are not normally available.)

Second, therefore, the average of the human indicators tells us something about the distribution. There cannot be high averages with too many people not participating. Since the non-poor have access to public services before the poor, reductions in infant mortality, etc. are indications of improvements for the poor. For life expectancy the average is actually better than a figure corrected for distribution between men and women. This is so because it is easier to extend the life expectancy of females than of males, if we start from the same life expectancy.⁸

⁸See Anand and Sen (1993).

Third, any upward move in a human indicator can be regarded as an improvement. Some might object if only the literacy of boys or the life expectancy of men is increased, but unless it can be shown that such increases worsen the fate of girls and women, by, for example, increasing the ability and desire to oppress them, to object would smack of envy and bitch-in-the-manger attitudes. (The social and economic returns on educating girls are, however, likely to be greater than those on educating boys.)

There is evidence that discrimination against women is greater, the lower their level of education. In this case, an equal improvement in everybody's education reduces anti-female bias.

Fourth, whereas high incomes of some can cause relative deprivation in others, this is not true for human indicators. If anything, the benefits in the health and education of anybody benefits the whole community.

Fifth, international income gaps, whether relative or absolute, may be inevitably widening, but to aim at reducing international gaps in human indicators is both sensible and feasible. In fact, looking at development in human terms presents a more cheerful picture than in income terms. Since 1960 average life expectancy has increased by 16 years, adult literacy by 40 per cent, nutritional levels by over 40 per cent, and child mortality rates have been halved. The international gap; unlike that in income per head, has closed. While average income per head in the South is 6 per cent of that in the North, life expectancy is 80 per cent, literacy 66 per cent and nutrition 85 per cent.

Sixth, human indicators show the troubles of over-development or, better, mal-development, as well as those of under-development. Diseases of affluence can kill, just as the diseases of poverty. Income, on the other hand, does not show up the destructive aspects of wealth.

Seventh, indicators that measure impact rather than inputs distinguish between goods and anti-bads (regrettable necessities) which bring us back to zero. Unnecessary food requirements arising from unwanted pregnancies and feeding children that die; or from long walks to collect water and fuel; or from excess work or from efforts to walk between unconsolidated plots or looking for work; for urban dwellers high housing and transport costs.

Eighth, and most important, there is considerable political appeal in a simple indicator that identifies important objectives and contrasts them with other indicators. It draws the attention of policy-makers to the social sectors.

The great philosopher Immanuel Kant wrote in his *Fundamental Principles of the Metaphysics of Morals*: "So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end, never as means only."

This is a very clear guideline. We certainly have to use others as means, and do so all the time. How else would we get our mail delivered, our food cooked, our cars serviced, our articles published? The whole division of labor is based on using other human beings as means. But Kant said "never as means only" This may be regarded as too minimal a requirement. If we occasionally nod or smile at our otherwise ruthlessly exploited slave, does that fulfill the condition of treating him not as means only? Still, in spite of the imprecision, we know

what Kant was driving at. It might serve as the motto for those concerned with human development.

Human development puts people back at centre stage, after decades in which a maze of technical concepts had obscured this fundamental vision. This is not to say that technical analyses should be abandoned. Far from it. But we should never lose sight of the ultimate purpose of the exercise, to treat men and women as ends, to improve the human condition, to enlarge people's choices.

Human beings are both ends in themselves and means of production. There are six reasons why we should promote human development and poverty eradication.

First, and above all, it is an end in itself, that needs no further justification.

Second, it is a means to higher productivity. A well nourished, healthy, educated, skilled, alert labor force is the most important productive asset. This has been widely recognized, though it is odd that hondas, beer and television are often accepted without questioning as final consumption goods, while "nutrition, education and health services have to be justified on grounds of their productivity.

Third, it reduces human reproductivity, by lowering the desired family size. This is generally regarded as desirable. It is paradoxical that a policy that reduces infant mortality and raises health standards generally should lead to lower population growth. One might think that more survivors mean more mouths to feed. But evidence shows that people try to over-insure themselves against infant deaths, and that reduced child deaths lead to lower desired family size. It is true that there is a time lag of about two decades between falling child

mortality and lower fertility rates. But other components of the human development strategy, such as better and longer education of girls, pay off sooner in smaller families.

Fourth, human development is good for the physical environment. The poor are both a cause (though not as large a cause as the rich) and the main victim of environmental degradation. Deforestation, desertification and soil erosion are reduced with poverty reduction. The impact of population growth and population density on the environment is more controversial. The conventional view is that it is detrimental. However, recent research has shown that rapid (though not accelerating) population growth and high population density (particularly if combined with secure land rights) can be good for terracing, soil conservation, and forests. More people in Guinea have meant more, not fewer trees. In Nepal increased erosion was the result of depopulation; terraces could not be maintained for lack of people. In the Kakagema District in Kenya the density of trees varies with the density of population. A study of the Machakos District in Kenya found a fivefold increase in population associated with a shift from a highly degrading to a much more sustainable agriculture⁹.

Fifth, reduced poverty contributes to a healthy civil society, democracy, and greater social stability. China has witnessed a rapid reduction in poverty, while maintaining an autocracy, but the call for freedom cannot be suppressed for long.

Sixth, it has political appeal, for it may reduce civil disturbances and increase political stability, though this will depend on the relation between aspirations and material

⁹I am indebted to Robert Chambers (1993) for this information. His paper also contains a list of sources on this subject.

improvements. If aspirations move too far ahead of improvements, this may lead to political instability.

Looking at the first two reasons, I will call those who stress the means or productivity aspect, with a strong emphasis on income and production, the human resource developers (an extreme form of whom are the human capitalists who adopt the human capital approach), and I will call those who stress the end aspect the humanitarians. At first blush, there appears to be a unity of interest between the human resource developers and the humanitarians. Although their motives are different, both have the same cause at heart, and they should embrace each other, for example, when it comes to promoting education. Means are means towards ends, which presumably are the same ends in both camps. This harmony of interests is reinforced by the widespread notion that "all good things go together."¹⁰

This unity of interests would exist if there were rigid links between economic production (as measured by income per head) and human development (reflected by human indicators such as life expectancy or literacy, or by achievements such as self-respect, not easily measured). But these two sets of indicators are not very closely related. Sri Lanka with an income per head of \$ 500 enjoys a life expectancy of 71 years, while Oman, with an income of \$ 6,700 has a life expectancy of only 66 years. South Africa's income is 2,010 but her life expectancy only 55 years. Adult literacy is lower in Saudi Arabia than in Sri Lanka, in spite of an income per head fifteen times as high. Jamaica's infant mortality rate is one quarter that of Brazil, while its income is only one half. Life expectancy

¹⁰Thus Jere R. Behrman writes about better nutrition among the poorer members of society "That productivity and equity concerns are in harmony is an important plus." (Behrman, 1993, p.1749).

in Costa Rica is 75 years at an income of \$ 1,600. A child born in Harlem in New York City has a lower life expectancy than one born in Bangladesh, one born in the District of Columbia, the capital city of one of the richest countries in the world, than one born in Sri Lanka. There are many other similar discrepancies, even though the correlation between economic and human indicators is quite high for all countries.

A lot of these discrepancies are, of course, due to different income distributions. Average income per head can conceal great inequalities. But there are other reasons too. The content and access to social services varies, particularly in poor countries, and different ratios devoted to basic education and preventive primary health services, are also important.

Nor is there agreement on policies between human resource developers and humanitarians. Means have a way of acquiring the characteristics of ends to which those who sponsored the initial ends do not subscribe.¹¹ The following seven points of difference are not based on the unity of logic but are comparable to the unity of psychological traits in different personalities.

First, humanitarians are concerned also with the unproductive, the lame ducks, the unemployables: the old, infirm, disabled, chronically sick. As Sudhir Anand and Amartya Sen (1993a, 1993b) have pointed out, these people suffer from a double disadvantage: they face greater difficulties in earning income, and in converting income into well-being.

There may be a bonus for the community looking after them, if not for higher productivity, at least for reduced

¹¹Some of the differences are due to the fact that one group attaches end values to what for the other group are pure means. The humanitarians may attach such value to participation.

reproductivity. If parents know that the community will care for them if they become disabled or infirm, an important cause of the desire for large families, and particularly many sons, disappears. This will also reduce the discrimination against females, but these benefits are incidental.

Second, the ability to convert means into ends, resources into worthwhile or satisfying activities, varies widely between different people. As we have seen, even such a basic good as food meets the needs of nutrition differently according to different circumstances.

Third, the resource or means approach lends itself to treating individuals as passive "targets", the approach that sees them as ends regards them as active, participating agents. Adherents of the latter approach would be more reluctant to talk of "target groups" for policies, and would appeal more to people's full, active participation.

Fourth, the content of their educational curriculum (and health programme) is different. One will aim at general education and learning for its own sake, and for understanding the world, while the other will be more vocational, aiming at training (including training for flexibility) rather than education.

Fifth, their view on the role of women will differ, one stressing the equity and social justice aspects, the other the efficiency or productivity aspects of removing discrimination against women. The former will advocate access to the labor market, the latter will stress the nurturing functions: breast-feeding, preparing meals, and looking after the family. Martha Nussbaum cites a story told by Plutarch. Three Spartan women were being sold as slaves. Their captors asked them what they

had learned to do. The first replied, "How to manage a household well." The second said, "How to be loyal." The third said, "How to be free." The replies raise the question whether there is a separate women's sphere or whether freedom and autonomy are to be aimed at. But all three are slaves, anyway. And the third, Plutarch reports, commits suicide.¹²

Those who advocate women's freedom and the abolition of discrimination on grounds of efficiency and productivity will welcome the benefits for men also, because they are engaged in positive-sum game. On the other hand, those who are concerned with women's rights as an end, as equity and social justice, will advocate policies that reduce the benefits to men and involve sacrifices by them. Men's support for the policies will tend to be different according to which aspect is stressed.

Sixth, their sectoral priorities will be different, housing being least connected with raising production,¹³ education most, with nutrition and health somewhere in the middle.

Seventh, the constituencies to which they appeal for support will also be different. The human resource developers appeal to mainstream economists, bankers,¹⁴ including the World Bank,¹⁵ and technocrats; the humanitarians to the churches, NGOs, action groups, idealists and moral philosophers.

The approach that sees nutrition, education and health as ends in themselves rather than means to higher productivity will argue for projects and programmes that enhance these ends,

¹²Martha Nussbaum, (1986).

¹³The Soviet Union, however, did keep housing scarce and used its allocation to attract workers to areas where they were needed for the plan.

¹⁴Keynes (1931) said of bankers "Lifelong practices...make them the most romantic and least realistic of men." But this does not seem to apply to this area.

¹⁵the World Bank's World Development Report 1993 on health has the sub-title "Investing in Health," as if good health had to show economic returns higher than the cost of capital. What if the returns to investment in health are zero?

even when conventionally measured rates of return on these investments turn out to be zero. It amounts to standing the conventional approach on its head, or rather back on its feet again.

A separate index covers aspects of human freedom and human rights, clearly an important aspect of human development. For life expectancy and literacy could be quite high in a well-managed prison. Basic physical needs are well met in a zoo. China shows remarkable progress on human development but without freedom and human rights.

Should the freedom index be integrated into the Human Development Index? There are some arguments in favour, but the balance of arguments is probably against. First, it might be said that freedom is so important (and, opportunity costs apart, costless) that no trade-off should be possible between its loss and gains in some of the other indicators.¹⁶ Secondly, political conditions are much more volatile than changes in education and health. Once a mother knows the importance of education for her children, or of hygienic behaviour, this knowledge is not lost even when incomes drop. So human indicators tend to be fairly stable. Political indicators, on the other hand, can change over night with a political coup. A third argument against aggregating freedom with the positive aspects of human development is that grading is more subjective and less reliable than measuring life expectancy or literacy.

Finally, one of the most interesting questions is how freedom is related to human development more narrowly interpreted, or how negative and positive rights or freedom are associated. This can be done only if they are recorded by

¹⁶This objection could be mitigated by using a geometrical rather than an arithmetic average. With a zero weight for freedom, the total index becomes zero, however high the other components.

separate indexes, not components of the same.¹⁷ Thus we might formulate a hypothesis, to be tested by the separate figures, that freedom, though not a necessary condition of human development, is entirely consistent with it even at quite low levels; and that human development, once it has reached a certain stage, leads inevitably to the call for freedom by the people.¹⁸ Here is a message of hope.

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¹⁷It could be said that the same argument applies to the relation between, e.g. literacy and life expectancy, and that they should therefore not be lumped together in a single HDI. Pioneering attempts to discuss related problems and to measure freedom and human rights have been made by Partha Dasgupta (1993).

¹⁸Even Hitler lasted for only twelve years.

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INFORMAL SECTOR SELF-EMPLOYMENT GENERATION IN PAKISTAN: CONSTRAINTS AND PROSPECTS

By

Khalid Aftab*

Introduction

It is well known that planners' faith in employment generation as a key element in overall development is based on the view that this is an effective means of poverty alleviation, reduction in income inequalities and raising productivity in the economy. Since the 1980s the development plans of the developing countries, particularly of the Asian region, have incorporated self-employment generation as an important national objective. In recent years the emphasis has focused more on the need for and the scope of informal sector self-employment. [ISSE] (1)

While the importance for self-employment generation in Pakistan is acknowledged, the potential share of the informal sector in the total appears to be overblown; hence the need for realistic assessment of the prospects of ISSE generation in the light of empirical evidence. We attempt to identify the real

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¹Informal sector is distinctly characterized by:(1) informal organizational structure, (2) lack of access to inputs provided through official channels; (3) shortage of resources (physical, financial, manpower) and (4) limited access to market.

factors without which sufficient self-employment creation in the informal sector would be impossible.

This paper has three parts. Part-I consists of introduction. Part-II identifies the major bottlenecks of the policy of informal sector self-employment generation. The last section (Part-III) lists the prospects and suggests recommendations for self-employment promotion in Pakistan.

II: EMPLOYMENT PLANNING: EIGHTH PLAN TARGETS AND CONSTRAINTS

The 8th plan provides the medium term framework for solving the unemployment problem of Pakistan. According to the Plan, the total jobs needed during 1993-98 are 7.38 millions (Table:4).

Table - 1

(MILLION)

Unemployment backlog at the beginning of the Plan	1.93
Increase in labour force	5.45
Number of people seeking jobs during 8th plan	7.38
Additional Employment generated by planned growth	5.72
Net overseas migration	0.50
Number of jobs to be created during the 8th Plan	<u>6.22</u>
Unemployment by the end of 8th plan	1.16
Unemployment Rate by the end of 8th Plan	3.0

Of those seeking jobs will include 400,000 pre-matriculates, 260,000 matriculates and intermediate degree holders, and 50,000 graduates --- all looking for soft government jobs.

The plan envisages a number of initiatives to deal with the task. Government intends to create 327,000 jobs of community workers, paramedics, teachers, and other professionals to accommodate a part of the unemployed workforce. All said, there exists a big gap between the planned job creation and the demand for these. The 8th plan proposes a number of measures for bridging this gap.

First, it is planned that a combination of high GNP growth rate (7.0% per annum) and reduced population growth rate through effective population control will reduce the pressure on the need for additional jobs.

In reality we observe that since the last year of the 7th Plan which registered only 2.3% growth, the economy has maintained much lower than the planned growth: it was 3.9% in 1993-94 and the current year's (1994-95) growth is less than 5.0%. It is worth mentioning that though the average annual growth rate of 7th plan period (1988-93) was also lower (5.0%) than the target of 6.5%, it has dropped considerably since 1992-93 due to internal and external factors. On the other hand, there is no relief in sight from the high population growth rate. Hence the expected reduction in the increasing demand for jobs in this period is not likely to occur.

The planners predict that policy reforms in energy, physical infrastructure and social sectors have set process in motion that will fill the existing structural demand-supply gaps and thus allow achievement of higher growth rate. If GNP growth rates be any indicator, this turnabout has not been taken by the economy so far.

The planners believe that if the GDP growth rate reaches the target by the end of 1998.¹ and appropriate policies are instituted to encourage labour-intensive, export-oriented growth, we could create 5.72 million jobs to absorb the unemployed through planned growth. But have we instituted the appropriate policies that would promote labour-intensive growth? The answer is, no.

On the contrary, we observe a clear bias toward capital intensive agriculture to increase output of higher value-added crops. This trend is further strengthened by the falling land-labour ratio as rapidly growing population is fast adding to the pressure on arable land. Hence the prospects of job creation in agriculture sector shall remain at best limited.

The apprehension is that the economic policies adopted under Structural Adjustment Facility are likely to increase capital intensive bias of manufacturing investments. The pro-trade bias of the macro policies is particularly expected to strengthen this trend, thus leaving limited scope for job creation.

JOB CREATION THROUGH SELF-EMPLOYMENT

So the gauntlet is thrown down to the small scale informal sector to create additional jobs for the large army of the unemployed. The planners hope that somehow the ever increasing unemployed labour will find ample opportunities of self-employment in this sector.

Various studies have shown that informal sectors' growth and employment creation capacity depends on a combination of factors viz. quality of education, availability of

¹Achievement of targeted growth rate of 7.0% by end 1998 would require GDP growth rate of 9.0% p.a. or more for the last three years of the Plan, which is a tall order.

technical manpower, access to finance, access to technical services and promotion of entrepreneurship through institutional support.²

The 8th Plans' heavy reliance on the informal sector for employment creation is subject to a number of other planned initiatives viz., (a) expansion of infrastructural facilities, (b) deregulation and liberalization of economy, (c) fiscal and financial incentives for this sector, (d) promotional programmes like better education and skills development, and (e) provision of common facilities and marketing arrangement.

A review of planned reforms and the actual conditions on the ground should allow us to assess the prospects of success in this regard. We focus attention only on the critical factor (education, vocational training, finance and institutional support services) without which informal sector self-employment generation would be impossible.

1. EDUCATION

Education is a catalyst for economic growth and employment. In majority of cases the facilities given under the self-employment schemes in Pakistan and other programmes are noted to have been availed by the educated. [Aftab (1993), Peri (1993); ILO-ARTEP (1990)]. There is enough evidence to believe that educated generally can organize business far better than the uneducated.

Pakistan's existing educational system neither caters to the demand of basic school education nor does it deliver the

²Various Federal and Provincial schemes of self-employment in urban and rural areas have been in operation for sometime. Among these are: (1) Rural Industrialization Programme (1987); (2) Self-Employment Scheme (1987); (3) Youth Investment Promotion Society (1987); (4) Small Business Finance Corporation (198) and some special programmes for target groups. For review of performance see Aftab (1990), ILO ARTEP (1993); and PERI (1993)

required quality to match the need of the labour market, let alone create entrepreneurial abilities needed for self-employment.

In our educational system because of the upward pressure for education the "content" has become more theoretical and abstract and less practical; the experience drawn on is less local and more universal, and cognitive skills are emphasised over manual skills. The education is dysfunctional for most types of employment -- in formal or informal sector --- and for playing other roles needed in a developing society.

What needs to be recognized is that quality of education, and the consequent capacity to be self-employed, is to be regarded more important for the introduction of new types of skills than the prior existence of particular occupational categories.

What we lack, and is also not addressed to in the 8th plan, is the issue of quality of education. A host of literature based on empirical evidence confirms that investment in school quality is likely to have a substantial and positive impact both on students' success in school and upon their success in the labour market. [Schiefebein, 1983]

VOCATIONAL TRAINING: (1)

Another important factor which facilitates self-employment is technical know - how and vocational training. It goes without saying that skilled and trained persons can set up business far better than the graduates with general education. Also that even informally acquired skills are an asset for being

1. In this section we draw on Ilyas (1992).

self-employed. Detailed case studies of SES and RIP have shown that know-how is extremely important for successful management of business while formal education proves to be an additional managerial asset.

It is also observed that "family business" experience is of great advantage in management of informal enterprises as it helps in problem solving much more than is generally appreciated. Self-employed person with family experience and skills has a distinct advantage over others. In whatever way acquired, skills of entrepreneurs are particularly important for management of business.

To meet the future needs of technical and vocational education in Pakistan, we need to take a fresh look at our technical education systems and bring it in line with the changing needs of the economy. At present we face a number of problems associated with adhoc policy planning and development efforts. One study lists at least nine major issues for the planners' attention: (1) poor quality of graduates of technical institutions, (2) lack of adequate manpower studies, (3) poor management of technical institutions, (4) poor coordination between different training institutions, (5) lack of uniformity of standards; (6) absence of linkage of technical institution with industry; (7) shortage of staff, (8) outdated courses, (9) shortage of funds. [Ilyas, 1992]

Another issue that emerges from the empirical studies is that Pakistani technical institutions supply manpower with traditional skills in excess of its demand but there is continuous shortage of high-technology new skills of technicians, computer operators, biomedical technicians, etc. This is the result of faulty planning in the management of technical institutions. The Pakistani technical educational institutions are completely

out of touch with the market demand for manpower with regard to quality and quantity. In fact, the surplus of persons with traditional skills who fail to be gainfully employed add to the army of educated unemployed. Therefore they move into the informal sector with lower entry standards.

RELATING TRAINING WITH SELF-EMPLOYMENT:

Village Specific Training

Another variant-and perhaps more relevant for Pakistan-of vocational training model is the one developed by ILO which directly relates vocational training with jobs: Training for Rural Gainful Activities (TRUGA). It first identifies specific employment opportunities and then bridges the gap between the existing levels of skills and the levels of skills required to carry out a particular employment activity. After providing the relevant training, it then follows up with appropriate support services and inputs which enable training to be practically applied.

Basically it is concerned with the village economy and therefore, success or failure of this model depends on the extent of peoples' participation. Community participation is extremely helpful as the local population is not only aware of their needs and aspiration but also of resources of the area. The popular participation in rural schemes also substantially improves plan implementation. Here the core element is the actual process of training as it is designed and related to the working requirements and the training needs. This methodology deserves strong consideration for self-employment generation, particularly of the rural women and youth.

Credit

No other single factor is so often regarded as the major constraint on informal sector's growth as the shortage of credit. All investors rate this as the first hurdle in their success as entrepreneurs.

There is, however, difference between the credit needs of modern organized small-scale industries and the informal sector enterprises. The investment and working capital requirements of the former are met largely by institutional credit, while the latter rely on internal cash generation and personal savings. The lack of technical know-how and access to supply and credit facilities inhibit their gaining a wider market.

Working capital presents the main financial bottleneck for the informal sector enterprises. It is needed to purchase raw materials when prices are low and also to finance the holding of work in process in off-season. In both cases, buffer of working capital permits steadier production and fuller use of capacity, thereby increasing the jobs and earnings at the lowest cost. What should be appreciated is that informal sector business have peculiar financial requirements, not likely to be met by the existing financial institutions.

Though this is decidedly not the only inhibiting factor, yet access to concessionary credit can facilitate growth of small and micro enterprises. Credit channelled through Small Business Finance Corporation, Self-Employment Scheme, YIPS and Rural Industrialization Programme has been generally well utilized and its positive impact on promotion of economic activity in the informal sector recorded [Aftab, (1993), PERI (1993)]. Yet the real issue is that due to various constraints,

small businesses do not manage to have easy access to institutional credit.

To solve this problem, it would be useful to set up a specialized financial institution for providing credit to the small and micro enterprises. Otherwise the potential growth of informal economic activities shall remain unexploited for non-availability of finance. The encouraging results of RIP and SES lend support to this proposal. This is, however, not to deny the fact that credit alone would not ensure growth of informal sector and hence of employment opportunities.

Support Services

Another major hurdle in the growth path of informal sector is lack of support services in the country. Enterprises of this sector are often left out of the institutional benefits that reach the formal sector enterprises. One broad area where institutional support is essential is that of industrial extension services. Industrial extension services are required in four areas: (a) economic services; (b) technical services; (c) management development; and (4) product improvement.

While the importance of support services (technical, designing, production, marketing, etc) for the informal sector enterprises cannot be over-emphasised, its delivery poses serious practical problems. Because of locational hazards, multiplicity of problems and limited public resources, the institutional support hardly reaches the informal sector enterprises. A part of the blame also rests on those firms who lack the organizational ability to avail whatever facilities exist [ILO-ARTEP, 1990].

Realizing the limitations of public sector extension services, we suggest adoption of a new approach to planning

support services for the informal sector: Planning in Partnership.

Let NGOs get involved in the planning process for support services in the early stage through to the final approval of a project. As a matter of fact, proposals for schemes can be invited from the experienced NGOs in the early stages of planning so that a strategy of implementation is worked out for a well identified goal. This approach shall have some distinct advantages over the existing system which does not assign any role to private sector in planning: (1) it will help identify new areas of activity; (2) mobilise non-governmental resources (technical knowledge, expertise, etc,) for planning the development of informal sector; (3) reduce public sector financial burden; and (4) make plan implementation more effective. The proposed "Government-NGOs" planning partnership in this field should be built on principle of mutual trust and support. In view of the significance of support services for ISSE promotion, the Government may call for proposals from the NGOs to see their response and the feasibility for implementation.

PART-III: PROSPECTS AND RECOMMENDATIONS

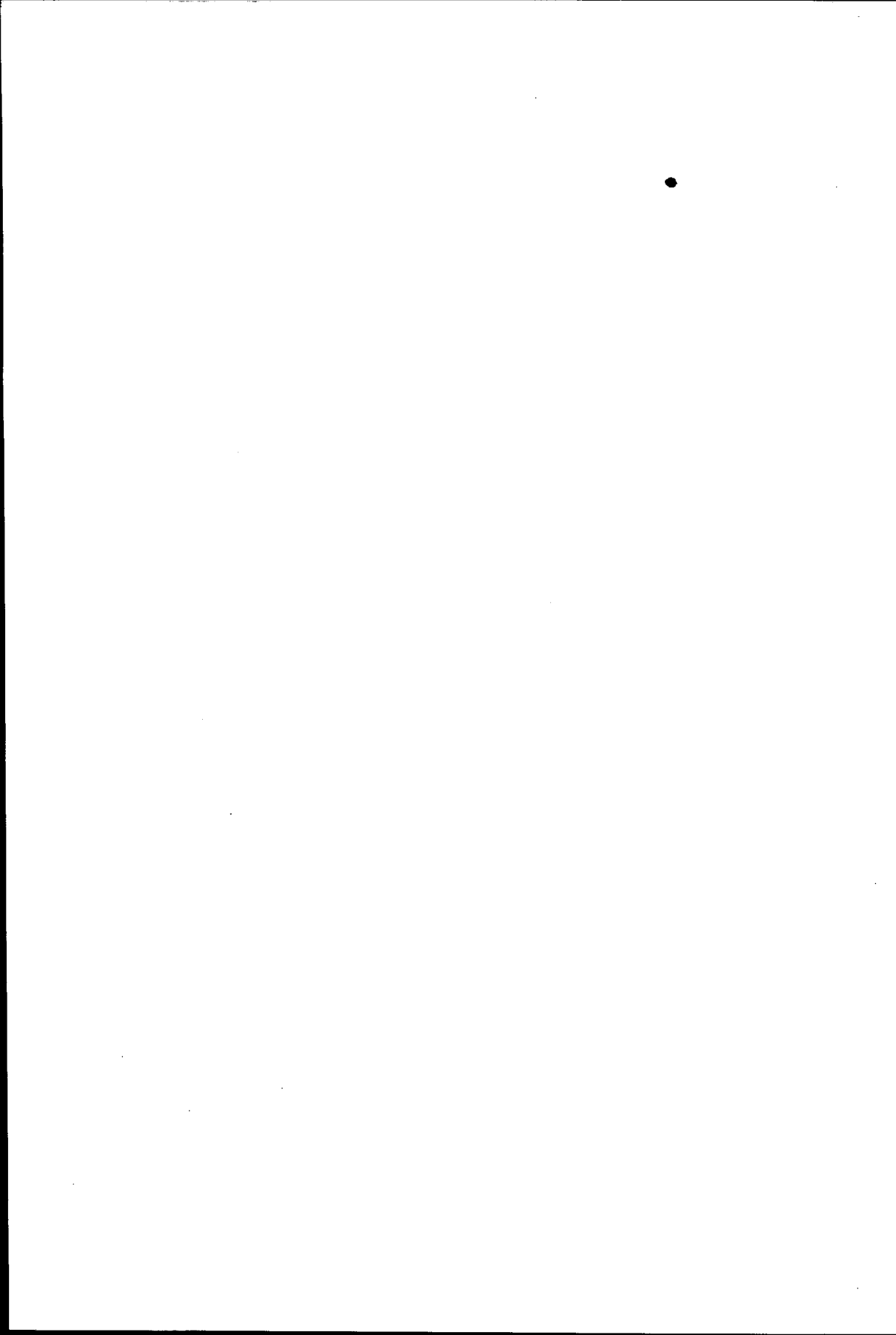
1. Informal sector is important because a large section of Pakistan's population is dependent on it. By virtue of its characteristics and that of those who work in it, informal sector contains a high concentration of poor section of the population.
2. Some of the unemployed persons may be employed in the informal sector if necessary conditions are fulfilled. However, small enterprises do not necessarily generate more jobs than the large. Some small-scale industries

have low K/L ratio and employ more labour than capital. The size of the firm and the capital intensity is often dictated by the products and the technology available for the manufacturing. Further, labour intensive manufacturing generates and supports more labour intensive jobs, though at lower productivity and wages.

3. It is more useful to identify the "real" factors responsible for unemployment, rather than to adopt the direct intervention policies (emergency relief measures) for informal sector employment on a permanent basis. The real factors which would determine the growth of ISSE are; (1) level and quality of education; (2) availability of skills; (3) access to institutional finance; and (4) access to support services. The success in reaching 8th Plan employment targets would directly depend on the supply of these inputs.
4. The workforce of the informal sector remains beyond the reach of institutional support services. There is need to arrange increasing volume of supervised concessional credit for this sector alongwith fiscal concessions (tax holidays), freedom from labour laws and creation of general environment conducive for economic growth.
5. There appears to be a strong case to adopt a new planning methodology for the informal sector, viz, "planning in partnership" wherein government and NGOs join hands for informal sector promotion rather than working for similar objective in two parallel streams.

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MARGINAL BENEFITS AND COSTS OF FERTILIZER SUBSIDY IN PAKISTAN

By

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1. Introduction

Agricultural growth in Pakistan is regarded as significantly influenced by the changing technological environment over the last few decades. In this context the most dramatic changes relate to the use of fertilizer. Total fertilizer use increased from 19000 N/T in 1960-61 to 443,000 N/T in 1973-74 and 1,719,000 N/T in 1987-88.

A prominent feature of the overall agricultural price policy of the country has been a relatively low level of foodgrain prices and a substantial fertilizer subsidy. Such a policy has been subjected to wide criticism on obvious grounds. Steps have been taken since the early eighties to raise the prices of both foodgrains and fertilizer.

In this short paper we use an approach to evaluating the social profitability of fertilizer subsidy by calculating the benefits and costs at the margin, i.e. for small increases or decreases in the subsidy. Since such a subsidy is frequently subjected to criticism, an evaluation on these lines might be

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useful for policy purposes. In doing so we closely follow a model presented by Timmer (1985).

The paper is arranged as follows. In section 2 we outline, briefly, a history of input subsidies. Section 3 sets out the model used in the analysis. In section 4 results are reported. Finally, in section 5 we present main conclusions.

2. A Historical View of Input Subsidies

Input pricing policy is considered as the second important layer of an overall agricultural price policy (after output pricing policy) and refers to government subsidies on vital agricultural inputs. The low input pricing policy has very similar objectives to the policy of high output prices, viz price stability for both producer and consumer, increased production and encouraging the use of modern technology.

During the sixties and the seventies authorities in Pakistan pursued a policy of agricultural input subsidies covering fertilizers, improved seeds, tube-wells and agricultural machinery. The major objectives were to provide greater production incentives and to encourage the use of superior technology. The idea implicit was that while high output prices may or may not lead to greater investment in better technology and may be diverted to higher consumption, subsidization of inputs which comprises the new technology would ensure its rapid adoption. Also while higher output prices may benefit only those farmers with marketable surpluses, low input pricing may enable subsistence farmers to produce such surpluses (Ahmed and Amjad, 1984).

Chemical fertilizers are widely believed to be the most important purchased inputs used in Pakistan's agriculture. The

share of fertilizers in total cost of cultivation ranges from 10 to 20 percent in case of important crops (GOP,1986). The nominal prices of fertilizer nutrients have increased by 379 to 420 percent between 1970-71 and 1985-86. However, the real prices have in fact declined slightly overtime. This may have been helpful in the promotion of chemical fertilizers use in the country.

Input subsidies rose quite steadily during the fifties and the sixties with a rapid increase in the subsidy bill during the seventies. It is worth noting that the subsidy bill for agricultural inputs amounted to a highest 14.15 percent of the development expenditure in 1979-80 as against 6.76 percent in 1972-73. The same has however declined to 5.65 percent in 1986-87 (see table 1).

Table 1

Government Subsidies, 1972-73 to 1986-87 (In Million Rs)

	1972-73	1979-80	1986-87
Consolidated Development Expenditure	5636	23793	36160
Input Subsidies in Agriculture	441	2703	2044
Percentage	6.76	14.15	5.65

Source: Pakistan Economic Survey, 1990-91.

The figures mentioned in table I suggest that subsidies on agricultural inputs are on the decline. This is because presently the government is pursuing a policy of setting higher prices for both agricultural outputs and inputs. Whereas this

has been widely considered as step towards right direction its impact on the rural masses, who happen to be the net buyers of foodgrains, could be a matter of great concern.

3. The Model

Let wheat production (W) be function of fertilizer use (F) and other factors (denoted by the vector Z), so that

$$W = g(F, Z) \text{ and } 'og/'oF > 0; 'o^2g/'oF^2 < 0 \quad \dots(1)$$

where $'og/'oF$ denotes first partial derivative.

Let fertilizer use be a function of fertilizer prices paid by farmers (P_F), wheat prices (P_W) and other factors (denoted by the vector X), so that

$$F = f(P_F, P_W, X) \text{ and } 'of/'oF < 0, 'of/'oP_w > 0 \quad \dots(2)$$

Then
$$W = g[f(P_F, P_W, X)Z] \quad \dots(3)$$

If P^*_F equals the full or social cost of fertilizer, then the unit subsidy on fertilizer (s) is equal to,

$$P^*_F - P_F = S \quad \dots(4)$$

Let
$$F^* = f(P^*_F, P_W, X) \quad \dots(5)$$

so that $P^*_F \cdot F^*$ is equal to farm fertilizer costs when $s = 0$, and $P_F \cdot F$ is equal to fertilizer costs if $s = 0$.

Let $G = s \cdot F$, where G is the total budget subsidy on fertilizer incurred by the government. This can be decomposed as follows:

$$G = s \cdot F^* + s(F - F^*) = G^* + G_m \quad \dots(6)$$

Thus G^* is the cost of subsidizing the fertilizer that farmers would use even at full cost pricing and G_m is the additional subsidy cost paid on the incremental fertilizer used by farmers because of the subsidy. Hence G^* is an income transfer from the budget to the fertilizer using farmers. The G^* may, however, cancel out in a benefit-cost comparison due to being a cost (to the budget) and a benefit (to the incomes of the farmers) unless government revenue has positive weight.

The social profitability of the fertilizer subsidy can be determined by comparing the benefits from the subsidy with the full cost incurred by implementing it. The benefits may be identified as follows:

- (i) The value of the increased wheat production generated by the greater fertilizer use stimulated by the subsidy. This may be equal to, $P_w(W - W^*)$, where W^* is the amount of wheat produced at P_F^* .
- (ii) The income transfer to farmers due to the lower price on current fertilizer use, $s.F^*$
- (iii) Any general equilibrium benefits that accrue. In the following analysis they are set equal to zero. According to above the benefits may add to,

$$B = P_w(W - W^*) + s.F^* \quad \dots(7)$$

Identifying the full costs of the fertilizer subsidy is not so easy. They may be specified as follows:

- (i) Added fertilizer cost to farmers, $P_F(F - F^*)$
- (ii) Budget subsidy cost, $s.F^* + s(F - F^*)$

- (iii) Social costs incurred because of the higher yields of wheat generated by the increased fertilizer use from the subsidy. The simplest formulation is to assume that these costs are some direct proportion of the increase in wheat production, given as, $m(W - W^*)$, where m stands for marketing and processing cost of wheat production.
- (iv) Any general equilibrium cost incurred. In this analysis they are set equal to zero. According to above the costs may add to,

$$C = sF^* + s(F - F^*) + P_F(F - F^*) + m(W - W^*) \quad \dots(8)$$

It is now possible to ask analytically what happens to benefits and costs when the fertilizer subsidy changes, and to compare the resulting values. Differentiate B and C with respect to s in equations (7) and (8):

$$dB/ds = P_w \cdot \text{'og'/'os} + F^* \quad \dots(9)$$

$$\text{and } dC/ds = F^* + P_F \cdot \text{'og'/'os} + m \cdot \text{'og'/'os} \quad \dots(10)$$

The important question is whether marginal benefits exceed marginal costs, that is, is $dB > dC$? if so the following expression holds (from expressions (9) and (10) the F^* term can be subtracted and 'og'/'os can be factored out)

$$P_w \cdot \text{'og'/'os} > P_F + m \cdot \text{'og'/'os} \quad \dots(11)$$

From expression (II) two points are worth noting. First, the term ('og'/'os), farmer's response to fertilizer price, drops out as it is irrelevant for evaluating marginal benefits relative to marginal costs if the income transfer due to the subsidy on current fertilizer use is assumed to just cancel the subsidy itself. Second, in line with standard neoclassical framework, the

benefits exceed costs if marginal revenue exceeds marginal costs.

4. Estimates and Results

To estimate whether marginal benefits exceed marginal cost we need to know the representative values of variables and parameters contained in expression (II). Such values are given in table 2:

Table - 2

Representative values of variables and parameters

Variable/Parameter	Value	Source
Price of Wheat(P_w)	2.57 Rs/Kg	Pakistan Economic Survey, 1990-91
Price of Fertilizer (P^*_F)	2.98 Rs/Kg	Pakistan Economic Survey, 1990-91
Marketing, Processing(m)	0.15 P	See Foot-note 2
Marginal Productivity of Fertilizer use('og/'of)	2.5-3.4	See foot-note 3

Inserting representative values given above in the marginal benefit-cost expression (II) we can find out whether the fertilizer subsidy has been socially profitable. In this regard we can experiment three different values of marginal productivity of fertilizer use-2.5, 3.00 and 3.4-alternatively.

From expression (II) $dB > dc$ if,

$$P_w \text{ 'og/'of} > P^*_F + m . \text{ 'og/'of}$$

By inserting representative values given in table 2, yields the following estimates:

Estimate 1 (given 'og/'of=2.5):

$$\begin{aligned} 2.57(2.5) &> 2.98 + 0.15(2.57)(2.5) \\ 6.43 &> 3.94 \\ 1.63 &> 1.00 \end{aligned}$$

Estimate 2 (given 'og/'of=3.0):

$$\begin{aligned} 2.57(3.0) &> 2.98 + 0.15(2.57)(3.0) \\ 7.71 &> 4.13 \\ 1.87 &> 1.00 \end{aligned}$$

Estimate 3 (given 'og/'of=3.4):

$$\begin{aligned} 2.57(3.4) &> 2.98 + 0.15(2.57)(3.4) \\ 8.74 &> 4.29 \\ 2.04 &> 1.00 \end{aligned}$$

The above estimates show that marginal benefits, under three different marginal productivity values, compare to marginal costs in a ratio of 1.7, 2.0 and 2.2 to 1 respectively. This implies that in Pakistan fertilizer subsidy has an incremental benefit-cost ratio significantly above one.

5. Some Concluding Remarks

There are various ways of conducting and evaluating social benefits and costs of public programmes. One way is to evaluate various policies as competing alternatives. In terms of present subject the work of Barker and Hayami (1976) comes

under this category. Another way is to undertake evaluation of a certain programme as a monopoly. The analysis carried out in present exercise may be viewed in that perspective.

In this rather a short paper we have compared the marginal benefits and costs of fertilizer subsidy, based on Pakistan's experience during the seventies and the early eighties. Our results show that fertilizer subsidy at margin has an incremental benefit-cost ratio significantly above one. One should, however, admit here that in terms of policy purposes the choice is never so simple. What on balance constitutes the best alternative has proved to be a matter of intense debate.

At this stage a few general comments on the desirability of subsidy are in order. Some economists in both developed as well as developing countries do not seem to accept the notion of a 'good' subsidy. Their main argument is based (and rightly so) on the theoretical competitive market equilibrium models. But, such conditions are seldom found in most of the LDCs. However, there is always a scope for second best alternative. Further, economic theory, does not give its judgement as to the social profitability of a particular subsidy especially in disequilibrium settings. As we have seen above this is an empirical issue.

Foot-Note:

1. For the sake of simplicity, our analysis is based on wheat (the most important output) and fertilizer (the most important input) only.
2. Most of the studies on India have used a cost of marketing and processing of wheat in the range of 10 to 15 percent (see, for instance, Sidhu and Sidhu, 1985). We

have assumed this to be 15 percent in the present analysis.

3. We have two sources for these values:

(i) a wheat production function ($Prod_w$) estimated by us for the period 1972 to 1987 yields following results,

$$Prod_w = 0.06 + 0.58 \text{ Area} + 0.25 \text{ Tf} - 0.001 \text{ Time}$$

(0.09) (1.09) (2.00) (0.10)

$$R^2 = 0.92, DW = 2.04; F = 98$$

where Tf = Total fertilizer used. This gives a $MP_{Tf} = 2.5$

(ii) in a recent study, Zuberi (1989) calculates values of 3.00 and 3.4 under different assumptions.

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SOCIO-ECONOMIC SIGNIFICANCE OF BIODIVERSITY CONSERVATION

By

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Biodiversity signifies the existence of the variety and abundance of plants, animals and micro-organisms encompassing the related ecological processes. It usually revolves around three levels, namely, genetic, species and ecosystem diversity. Genetic diversity comprises the information contained in the genes of individual species. Species diversity refers to the variety of living organisms. Eco-system diversity concerns the enormous variety of habitats and biotic communities that form a part of the eco-systems (2, 5, 14, 18, 20).

Human knowledge is rather limited with regard to these three forms of biodiversity in quantitative terms. For instance, the exact number of biotic species is still unknown; estimates range from two to hundred million of which hardly one million have been named so far. The species considered of some economic value may hardly be less than half a million (18). Pakistan's ecosystems support about 10,000 species of which about 200 are at the verge of extinction (15).

Existence of biodiversity is considered to be of vital significance to the human race. A cursory review of the

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succession process would indicate that the human culture emanated from a rich eco-system comprising complex biodiversity. The progress attained by humanity in economic, technological and other fields may be attributed to the great variety of eco-systems Nature has created on the surface of this globe (19).

By its inherent nature, biodiversity is highly value-laden. Some salient values that may be attributed to biodiversity could be summarized as under (2, 117):

i. Economic values

Civilization may not have been possible without the existence of biodiversity. It is the most politically appealing and economically attractive value in favour of maintaining biodiversity. Enormous benefits accrue from it in the form of food, medicines, natural raw materials and many other physical benefits which may emanate from it in the times to come. For instance, the genetic richness of wild plants is indispensable for developing new varieties of agricultural crops and medicines. These direct economic values of biodiversity are easy to quantify.

ii. Life support values

Biodiversity is not only the spring of life but it also provides a life support system which gives rise to forests, rain, rivers, soils, sunshine, wind, and the trophic primates of succession. There can be no healthy human community unless it is integrated with an eco-system. Thus, the primary life support system is provided by the existence of biodiversity.

iii. Aesthetic values

Forests are always beautiful and so is an eco-system. Even a degenerated eco-system contains so much of biodiversity as to fill the space against the sky and make the landscape attractive. In a healthy eco-system, the human mind experiences a sense of the sublime which is certainly not available elsewhere in the society. The aesthetic values of biodiversity are a source of irreplaceable wonder, spirituality and inspiration which can be hardly enjoyed by the human beings in habitated surroundings.

iv. Recreational values

A forest eco-system containing a wide biodiversity provides an opportunity to the human beings to leave their artificial abodes and to seek pleasure in the wild natural environments. In a primeval eco-system, a visitor could find a trail to hike, a mountain to climb, game to shoot. He can also find a rich variety of native and migratory birds, view the wild flowers, rushing streams and enjoy the air free of pollution and contamination. An eco-system is a recreational theatre and God-given gymnasium which can produce nothing but healthy feelings in the human minds.

v. Scientific values

As mentioned earlier, about ninety five percent of biodiversity still remains undiscovered, especially from economic point of view. The least understood levels of biodiversity are genetic as well as ecological. An eco-system provides an immeasurable natural laboratory for studying the course of genetic, ecological and scholastic evolution.

vi. Biotic Diversity values

Nature has bestowed upon this globe an immeasurable variety of plants, animals and micro-organisms, the exact number of which is still unknown. Of an estimated hundred million species, the human race has so far been able to identify only about one million. Of all these identified species, the economic value of only half of them has been realized. It will take many centuries for the human race to capture the full spectrum of socio-economic benefits of biodiversity created by Nature on the surface of this globe.

vii. Intrinsic values

Life enters the civilized world at the end of the level of its origin and various stages of evolution having been spent in the biotic communities. Even a managed eco-system would have its wilderness implications because life on this globe transcends human control, will and use. Wildlife encompasses flora as well as the fauna, which makes the globe a livable place and distinguishes it from millions of other planets.

viii. Natural history values

A primeval eco-system represents the environments from which the variety of life we recognize today originated. An eco-system containing a variety of biotic communities amounts to a tangible preserve of evolution and contributes to the human sense of duration, continuity, antiquity and identity. It is easy to imagine that a visitor to a forest soon starts appreciating the interplay of ecological forces of evolution, erosion and geomorphological processes.

ix. Spiritual values

Bryant has rightly stated that the groves of trees were God's first temples. In Latin, the groves of trees are still called *templum*. The Celts used to worship among the sacred oaks before the Romans came. A wild forest is a sacred place where the trees rise to the sky like minarets and the spires. A healthy biotic community inspires spiritual values. It is believed that most of the prophets and the Sages attained their inspiration towards the existence of God from the forests and other natured phenomena.

x. Wildlife values

Life on earth is Nature's greatest miracle. It originates in biotic communities and with progressive succession, it takes root in the society. Wildlife, as we know it, encompasses natural flora and fauna which are the store-house of food, medicines, shelter, clothing and industrial raw material on which the climax of all life-the human race thrives.

It is obvious from the foregoing account that an ecosystem represents a complex world of biodiversity which not only is the source of life but also its sustaining energy. The tragedy of technological, scientific and socioeconomic progress is that it has created counter-currents which have eroded away of the values associated with biodiversity. The most significant effect of human progress is the destruction of biodiversity by clearing of land for agriculture, filling up of wetlands, destruction of coastal areas and conversion of natural ecosystems for human settlements and industry. Human progress has played a deleterious role in biodiversity loss by over-exploitation of plants and animals, abundance of introduced

species and wide-spread pollution leading to retrogression in biodiversity (11, 13).

Rapid population growth has created complex situations containing economic externalities and social, political and cultural forces which tend to degenerate the natural ecosystem. Market forces also tend to undermine biodiversity by enticing the over-use of natural resources. The most unfortunate part is that conservation of biodiversity is totally ignored in national policies. Even the scientifically advanced countries continue to justify the destruction of their natural resources to satisfy their short range socio-economic interests (16).

For the last couple of decades, a discernible realisation has emerged all over the world towards the importance of preservation of biodiversity for the socioeconomic welfare of the human race. A number of conventions have been held in various parts of the world to develop a concensus on evolving a strategy for the conservation of biodiversity, to save the natural environments and to forestall the impending environmental disaster. Some important conventions held so far in this regard are the following:

i. The Man and the Biosphere Programme (MAB)-1970

This programme was organized by the UNESCO in 1970 for developing a long term programme of research, training and information concerning the environmental management. The ultimate objective of this programme was to develop a world wide network of research on biodiversity, population growth, conservation and sustainable use of natural resources.

ii. The Convention on Wetlands of International Importance (RAMSAR, 1971)

This convention was held at RAMSAR in 1971 in which it was resolved that the participating nations would use their wetlands wisely and save them from possible extinction. So far about half a million square kilometers of wetlands have been covered by the Ramsar convention.

iii. Convention on the Protection of World Cultural and Natural Heritage (PWCNH) -1972

This convention is in force since 1975 under which the unique natural and cultural heritage are to be preserved for posterity. A list of 337 world heritage sites was published in 1991.

iv. Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) -1973

This convention was held in Washington in 1973. In all, 111 countries ratified it. The purpose of this convention is to prevent commercial trade of the endangered species and to regulate their exploitation through a permit system.

v. Convention on the Conservation of Migratory Species of Wild Animals (CMSWA) -1979

This convention binds the participating countries to protect the endangered migratory species from overexploitation. About fifty one migratory species have been listed as endangered. These include four species of whales, several species of antelopes, twenty nine bird species and six marine turtles. The convention impresses upon the participating countries to conserve the habitats so that the

endangered species could survive their diminishing populations.

vi. The FAO International Undertaking on Plant Genetic Resources (IUPGR) -1983

This agreement was signed in Rome in 1983 in which a commitment was given by the participants to conserve plant genetic resources as a common human heritage. So far, 112 countries have become members of this convention. Research on a variety of subjects for the preservation of the genetic pool have been organized by the FAO.

vii. Convention for the Protection of the Natural Resources and Environments (PNRE) -1986

This regional convention was held under the UNEP to promote regional cooperation for the protection of environments and natural resources of the South Pacific region.

This is a summarised account of the world-wide efforts initiated by several international NGO's and government-sponsored organizations to conserve and perpetuate the natural flora and fauna in the long-term welfare of the human race. This is but a beginning. A lot more needs to be done to evolve a global strategy to arrest biotic retrogression and ensure healthy survival of the man and his environments.

Pakistan is a signatory to a number of these conventions, notably the MAB, RAMSAR, CITES, PWCNH, CMSWA, IUPGR and PNRE. But very little has been done in this country to conserve its already thin ecological reserves. In its 24,800 km² of natural forests, the annual rate of deforestation has gone upto 0.4% (6). Approximately 8,600 km² of its land-mass is covered by wetlands which provide an ideal

habitat to migratory and indigenous birds but also is a valuable source of fisheries. Unfortunately, this resource too has shrunk nearly to one-half, thus endangering several species of birds and fish (17). In order to ameliorate the situation, Pakistan has declared about 36,550 km² of its territory as "protected areas" in the form of National Parks, Game Sanctuaries, Reserve Forests, Nature Reserves, National Heritage Sites, Ramsar Sites etc. The objective is to provide conditions conducive to the preservation, conservation and propagation of biotic resources for the ultimate welfare of the country. Much more, however, requires to be done through enunciation of bold policies, legislative enactments and deep-rooted cooperation between the national and international organizations concerned with conservation programmes. The more we invest in such efforts, the more will be harvested by the coming generations.

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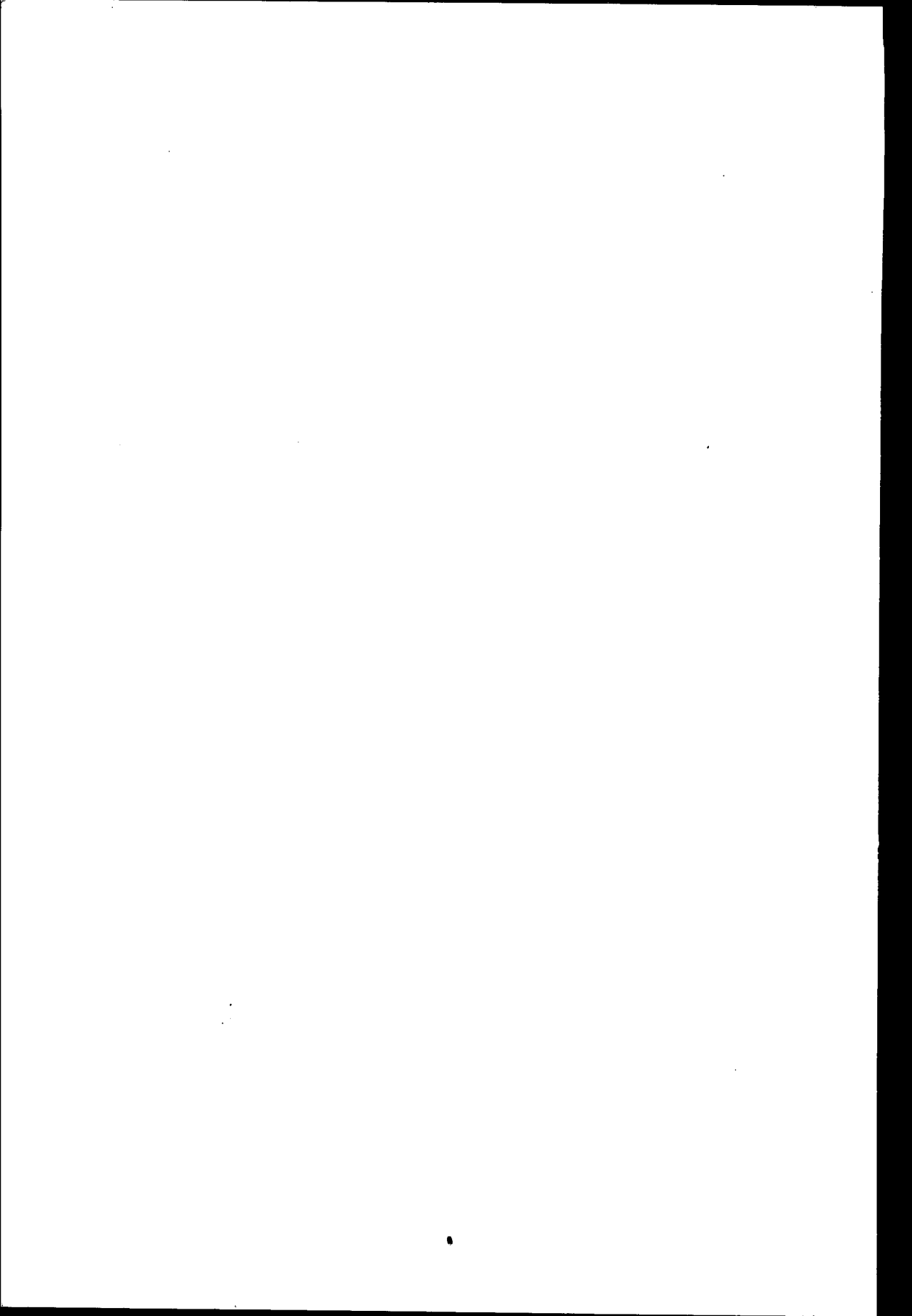
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THE QUANTITY RESTRICTION AND THE TEXTILE SECTOR'S GROWTH

By

Seemi Waheed*

Introduction

The textile sector is the major sector of the economy of Pakistan in terms of contribution to employment and export. It employs 20 percent of labor force and accounts for 58 percent of total export (UNIDO, 1989). The small scale power loom sector employs more than double the number of workers in the large scale sector. It is, therefore, an important sub-sector of textile industry.

The quota restrictions tend to depress exports of textiles. There are 80 different categories of quota items included under cotton yarn, cotton-cloth, made-up articles, knitwear and garments. These items are exported to USA, EEC, Canada, Finland and Norway. USA is the major buyer of textile exports from Pakistan. The Pakistani textiles exports also face competition from China, Korea, Taiwan and India.

The quota restriction has created cartel of quota sellers who control its supply. This results in underutilisation of quota.

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which seriously hampers growth and efficiency of local textile industry and deprives the country of foreign exchange.

The paper attempts to review and analyze the working of quota market and its impact on textile output and export. It attempts to establish relationship between quantity restrictions and expansion of textile industry and its sub-sector (small scale) during 1988-92. The overall export performance is analyzed keeping in view the working of quota market.

QUOTA RESTRICTIONS

The evolution of the Multi Fibre Arrangement (MFA).

The restrictive policies in cotton textile trade started in 1962 with the Short Term Agreement (STA) (1961-62). This agreement allowed the developed countries to impose quantity restrictions on specific suppliers from developing countries. This agreement was followed by Long Term Arrangement (LTA) (1962-74) (Annexure-I). This arrangement also restricted imports from developing countries which may disrupt the markets of developed countries. These restrictions could be bilateral or unilateral. Later on, in 1974 LTA was replaced by MFA. It was extended to non-cotton textiles as well. This arrangement was renewed in 1977, 1981, 1986 and then in 1991. The overall impact of MFA has been protectionist. The agreement became increasingly more restrictive encompassing more and more non-traditional products.

The agreement was contrary to the policies of General Agreement on Trade and Tariff (GATT), which prohibited the use of quantity restrictions on imports or exports, except where

permitted in specific circumstances, under specific conditions and in accordance with specific procedures.

The Dunkel Plan submitted by the Director General of GATT on December 20, 1992 aimed to reform the present international trade in textiles. According to the plan, there would be gradual phasing out of quota in a period of ten years. During the period of transition, quotas will be removed on certain percentage of imports. However, removal of quota will be bilaterally resolved. This plan was expected to come into force from January 1, 1993, but owing to resistance from USA and the European Community, the plan was shelved.

The Emergence of the World Trade Organisation (WTO).

The conclusion of Uruguay Round of GATT has brought some hopes and frustrations for developing countries. The accord on Uruguay Round was signed at the ministerial conference in April 1994 and after ratification by individual signatory states it has come into effect on January 1, 1995.

Another important development in this direction is the creation of World Trade Organization (WTO) which is expected to replace GATT. WTO will have statutory basis in international law, unlike its predecessor. Under the terms of WTO, tariffs will be reduced on number of manufactured products. For the first time the rules of world trade will cover agriculture and service sectors. Under this organization, ministers will meet every two years to discuss national trade policies. At the same time a general council will be established to oversee the working of the WTO and implementation of the ministerial decisions on a regular basis.

The United States, however, ensured that this organization does not have the power to overrule US trade laws. The countries whose industries were protected fought to retain the barriers against foreign competition. However, both importing and exporting countries have agreed to end current quota system and bring textile rules under international trade rule. There will be phasing out of quota on textile items over a period of ten years. Under this proposal all quotas with current annual growth of six percent will increase to 133 percent during the transition period. The MFA will thus become redundant.

The creation of WTO is expected to benefit South Asian countries. Japan and China are expected to benefit to the extent of \$ 40 billion in annual trade. India's export will increase from \$ 1.5 billion to \$ 2.0 billion and would result in more jobs. The benefits to Pakistan's trade so far are not quantified, but some improvement can be expected subject to export of quality value-added items and full utilization of the existing quota.

The Working of the Quota System:

The market of quota ditribution has been created as a result of quantity restrictions. Quota in textiles, whether grey cloth or made-up articles or garments or knitwear is freely traded, bought and sold like any other commodity in the market. Each year the quota in textile sector is negotiated bilaterally between exporting and importing countries. If exports are in excess of quota in year one, then the excess is deducted in year two. However, if there is a shortfall in quota in year one it is lapsed in year two and quota for that item is

reduced. If the quota is fully utilized, the importing country gives an increase of 7% of the previous quota.

The Export Promotion Bureau of Pakistan, every year, keeps 10% quota, while the remaining 90% is given to the registered exporters namely associations, producers of textiles, brokers or middle-men. This quota is then traded in the open market at much higher prices.

The government gives due weightage to full utilisation of the allotted quotas and production and export of quality items while allotting quotas in a subsequent year. For example, if the producer has a quota of 5000 dozens of shirts and is able to utilize it fully, then in the following year, an additional 'performance quota' of 50% of the previous quota is given. The additional quota is also given subject to improvement in the quality of products.

The figures from US custom authorities reveal that quota from Pakistan has not been fully utilized since 1990. The underutilization of quota is owing to hoarding of quota by middle-men and few big textile exporters. The quantity restriction has created a group of such sellers who want to extract maximum profit. In 1993, 40% of quota was not utilized, despite a large number of orders from US companies. Table-I shows the selected categories, quota and its utilization.

Table - I

Selected Categories, Quota Availability and its Utilization

Category	Item	Quota	Utilization	% utilization
340-D/640-D	Shirt (M&B)	160,500 (doz)	13,269 (doz)	8.3
237	play suit/ sun suit	207,412 (doz)	34,066	16.4
239	infant wear	-	-	21.8
359-C/659-C	other cotton apparel	968,086 (kg)	121,470 (kg)	12.5

As a result of monopoly, a number of popular categories of quota remained unutilized. The prices charged by brokers in category 339 (knit shirt and blouse) was Rs.600 per dozen against the market rate of Rs.350 per dozen. Exporters had orders running into millions of dollars which lapsed owing to exorbitant prices charged by hoarders. Since quota is not fully utilized, therefore, it is likely that US may reduce textile quota for Pakistan.

The non-mill power-loom sector is unable to directly export because of small size and inadequate working capital. Also, under such conditions where price of quota is skyrocketing, it becomes extremely difficult for this sector to buy quota from brokers and export on their own. The registered exporters like associations, middle-men, brokers etc hold quota and give orders to small producers who more often than not are unable to meet the demand owing to their size and working capital.

State of Export of Textiles

Pakistan manufactures a large variety of textile products. Some of its products have gained popularity in overseas markets, for example, knit wear, cotton cloth and made-up textiles. If quota restrictions on export of textiles are removed, Pakistan's textile industry will be able to compete with other textile exporting countries. This will also result in elimination of the market inefficiencies.

The major manufactured export item is cotton yarn which has little value addition. In 1992 Pakistan's share in yarn production was 6.7%. Its share in global yarn export was 31%. There has been shortage of yarn due to poor cotton crop and its export in large quantity. Yarn is less value-added item and its shortage, affects the local textile industry. In such conditions cotton yarn becomes scarce and there is a steep increase in the price of the yarn. For small and medium non-mill sector it becomes difficult to buy yarn at such high prices.

Table-II shows the value and percentage share of major textiles in total exports. A comparison of data of the last four years shows that percentage share of cotton yarn in total exports has increased modestly. However, in terms of volume there has been significant increase. The percentage share of cotton cloth, garments and made-up textiles has almost stagnated. The increase in the share of synthetic textiles and knitwear was significant. The share in the case of synthetic textiles increased from 2.5% in 1988-89 to 6.0% in 1991-92. In the case of knitwear this increase was from 3.5% in 1988-89 to 6.1% in 1991-92.

This shows that synthetic textiles and knitwear were able to fetch better price in the world market. The percentage

share of export of cotton cloth experienced stagnation in terms of value.

Table-III shows the quantity and per unit price of major exports. The export of raw cotton experienced decline in terms of quantity, however, there was major increase in export of cotton yarn, although the unit price almost stagnated.

Table - II

Value and % share of Major Textiles in Total Exports

	1988-89		1989-90		1990-91		1991-92	
	(mln.\$)	(%share)	(mln.\$)	(%Share)	(mln.\$)	(%Share)	(mln.\$)	(%Share)
Total Exports	4661.0	-	4954.0	-	6131.0	-	6904.0	-
Cotton yarn	600.8	12.8	833.7	16.8	1183.0	19.2	1172.0	16.9
Cotton cloth	464.8	9.9	559.0	11.0	675.0	11.0	819.4	11.8
Garments	335.5	7.1	393.8	7.9	497.1	8.1	613.5	8.8
Made-up textiles	347.1	7.4	398.8	8.0	484.5	7.8	534.2	7.7
Synthetic textile	116.7	2.5	212.0	4.2	347.6	5.6	418.4	6.0
Knit-wear	166.9	3.5	273.7	5.5	333.6	5.4	425.1	6.1
Tent & canvass	41.1	0.87	28.8	0.58	79.6	1.2	51.2	0.74
Total Textile export	2072.9	44.4	2699.8	44.9	3600.4	58.7	4033.8	58.4

Source: The State of Pakistan's Foreign Trade 1987-88, 1989-90 and 1991-92

Table - III
Quantity and per unit export price of major textiles

	1985-86	1986-87	% change	1987-88	% change	1988-89	% change	1989-90	% change	1990-91	% change
Raw cotton											
(mln. bales)	4	4	0	3	-25	5	66	2	-60	2	0
(\$/bale)	136.6	118.5		206.7		185.9		221.5		248.5	
Cotton yarn											
(mln. kg)	158	260	64	211	-18.8	292	38	377	29	506	34
(\$/kg)	1.8	2.0		2.6		2.1		2.2		2.4	
Cotton cloth											
(mln. SQM)	727	639	-12	849	32	845	-0.47	1018	20	1057	3.8
(\$/SQM)	0.4	0.5		0.6		0.6		0.5		0.6	
Ready made garments (excl. leather garments)											
(mln. doz.)	10	15	50	15	0	16	6.0	19	18	21	10.5
(\$/doz.)	20.0	23.7		23.3		21.0		20.7		23.6	

Source: The State of Pakistan's Foreign Trade 1989-90 and 1990-91

The volume of cloth exported did not increase significantly from 1985-86 to 1988-89 and the price per unit also remained stagnant. The ready-made garments experienced mixed pattern of increase and decrease in export from 1985-86 to 1990-91. However, price per unit increased from \$20/dozen in 1985-86 to \$23.6/dozen in 1990-91. The export of cotton cloth and ready-made garments for period under study (1985-86 to 1990-91) is less than the export of cotton yarn in terms of volume. Lesser export of ready-made garments/knitwear, etc is attributed to underutilization of quota and bias of importing countries towards less value-added products. Reduction or removal in quota restrictions will improve volume and value of export, break cartel of few brokers and increase foreign exchange earnings. The reason for the high export of cotton yarn does not

entirely rest in favourable demand, but is also attributable to the influence and hegemony of domestic yarn producers on export policies.

Table-IV shows production of cotton cloth for selected years. In 1984-85 the production was 271 million square metre (SQM). In 1985-86 it declined to 253 million SQM. During 1987-88 there was increase in production to the tune of 281 million SQM. The overall change in production from 1987-88 to 1991-92 has been observed to be 2.12% which is very small. The reverberating effects of decline in production were also observed in the small power loom sector manufacturing and exporting grey cloth in large quantity. During the period, number of small units were closed. The units that were operating experienced low profits.

Table - IV

Production of Cloth During the Selected Years

Year	Cloth (000 sq.meters)	% increase/ decrease
1984-85	271,831	-
1985-86	253,480	-6.75
1986-87	237,879	-6.30
1987-88	281,620	18.30
1988-89	269,862	-4.17
1989-90	294,839	9.25
1990-91	292,911	-0.65
1991-92	307,933	5.12
Overall increase/ decrease		2.12

Source: Economic Survey of Pakistan 1993

Pakistan's Exports Vis-a-Vis Exports of Competing Countries

China, Taiwan, India, Indonesia, Republic of Korea, Malaysia and Pakistan are the main competitors in the textile trade at the international level. Percentage share of textile exports in total exports in the case of Pakistan is significantly higher compared to its rival exporters (Table V).

As mentioned earlier, growth in production and export of textile has not been very encouraging, however, in terms of value, exports increased by 16.7%, between 1990 to 1991 (Table-V).

Table - V
Exports and Imports of Countries Competing in Textiles
(Million US \$)

	1990 Export	1991 Exports	Percentage increase/ decrease in export	Textile export as % of total export
China & Taiwan	67,025	76,090	13.5	16
India	17,967	17,664	-1.7	25
Indonesia	25,553	28,997	13.4	14
Korea Rep	64,837	71,672	10.5	21
Malaysia	29,409	34,300	16.6	6
Pakistan	5,590	6,528	16.7	60

Source: World Development Report 1993 and 1992

Aside from devaluation of currency, two other factors seem to have contributed: one, Pakistan started exporting non-traditional items and second, the competition within the textile industry increased over the years, specially in garments/knitwear. The government provided incentives to exporters to bring export price of unit commodity at par with international prices. An increase in export price is an incentive for enhanced quota in the following year for firms. This implies that in order to get enhanced quota, exporters try to bring quality to international standard. The competition to improve quality and bring prices to international level also increased export value to some extent.

The Power-loom Sector:

As pointed out in the beginning that there are 111,000 power looms in the country, employing 200,000 people. This sector is recognised as non-mill sector. The non-mill sector (or small power loom sector) produced 2700 million SQM of cloth in 1991-92 as against the production of mill sector of 308 million SQM during the same year. The non-mill power-loom sector is an important industry of Pakistan, both from export and domestic standpoint. The share of non-mill sector in the export of cloth is 80-90% as against 10-20% of the mill sector. A significant proportion of output is produced for local market as well. This section attempts to show that while the production declined/stagnated in the mill sector, the production of grey cloth also experienced decline/stagnation.

It would be appropriate to define a small power loom unit. It is defined as a unit having not more than 16 power looms.

The looms operating in the sector are called 'conventional' power-looms. These are semi-automatic and locally manufactured. The looms can produce coarse to fine quality grey cloth, kitchen towels, napkins etc. This industry is a household activity, spread over the Province of the Punjab. It is widely scattered and poorly organized. The concentration of the industry is in Faisalabad, Multan, Kasur, Jhang, Kamalia and Gujranwala.

Survey of the Small-Power Loom Sector and its Findings:

Keeping in view the concentration of power-looms in the selected cities a survey of small power-loom sector was carried out by Pakistan Administrative Staff College (PASC). 455 owners of small units were interviewed. In 455 units, 2626 power looms were operating. An estimate of looms operating in Punjab was 34,522. The sample thus was 7.6% of the total population. However, power-looms operating in Punjab constitute 3% of the looms operating in the whole of the country. Therefore, looms selected from Punjab are fairly representative of Population. (Information about the population size of power-looms was taken from the Department of Industries and Mineral Development, Government of the Punjab and Small power-loom Association, Faisalabad. The list provided by the Department helped in reaching the clusters of units in each selected city. Random sampling technique was used to pick out units for interviews out of the clusters.)

The manufacturing is mainly on principal's order. The orders for manufacturing are received through various levels, that is, from big export houses to middle-men and then to small manufacturers. The middle man in this sector buys quota from big export houses and distributes among power loom owners. The sector is, therefore, affected by the quota distribution

market. In the previous analysis, production, export and declining trend of export of cloth were mentioned. Since the export of cotton cloth has declined it has affected the production of small power-loom sector, which also contributes significantly towards exports.

Regarding output during the last five years, 33% of manufacturers responded that their output has grown, 27% percent (124) reported that their output has declined. 38.9% responded that the output stagnated during the last five years.

Table - VI
Position of Output During 1988-92

Reponse	Respondents	Percentage
Grown	152	33.4
Declined	124	27.2
Stagnant	177	38.9
No response	2	0.43
Total	455	100.0

Source: Survey data (1992)

Figures at the national level also confirm these findings. As pointed out in the beginning of the paper that during 80's the output was 297 million square meter and during 1991-92 it was 307 million square meter. These figures are of large and medium scale sector showing an increase of only 10 million square meter during the last ten years. It reflects market position and corresponds to the response given by small manufacturers.

Conclusions

Several issues affecting export of textile have been pointed out. These issues relate to the problems of cotton production, greater export of yarn, world recession etc. However, quantity restriction significantly restrains expansion of textile sector. The analysis also shows the mechanics and working of quota market, created as a result of quantity restriction and its impact on production of cloth in the mill and non-mill sector.

The trade at the global level is moving towards reduction in tariff and quantity restrictions (QR). However, the exports of developing countries are still subjected to QR. Had there been no QR, the industry would have produced to its optimal capacity and overseas competition would have led producers to become quality conscious.

Although GATT and MFA stand redundant in the light of new changes occurring as a result of creation of WTO and phasing-out of quantity restrictions, however, it will take another ten years to get rid of quota. In the meanwhile there is a need to regulate the quota market so that quota is fully utilized and the slow down of manufacturing in textile sector is mitigated to certain extent. There could be several ways of regulating quota, for example, if those who hold quota are unable to utilize it fully for two years, their quota should stand cancelled, without exception. As an incentive performance quota should be continued.

The non-mill sector, provides employment and contributes towards export, however, does not receive export incentives. It is suggested to provide incentives to this sector, to improve its working. The government should also encourage

production and export of value-added products and discourage the export of cotton yarn.

Annexure - I

EXHIBIT - I

Arrangements Affecting Trade in Textile and Clothing

Arrangement	Period	Products	Regulations
Short Term Arrangement	1961-62	Cotton products	Short term quantity restriction on specific suppliers in case of 'market disruption.
Long Term Arrangement	1962-74	Textile and clothing products with 50 percent of cotton (in value)	<ol style="list-style-type: none"> 1. New restrictions permitted where 'market disruption'. 2. Controls either unilaterally or bilaterally negotiated. 3. Quota levels not below imports in preceding period. 4. Minimum annual volume growth of 5% within quotas.
Multi Fiber Arrangement (MFAI)	1974-77	Coverage extended to all textiles and clothing of wool, cotton and synthetic fibers	<ol style="list-style-type: none"> 1. As in LTA with more specification of real or threatened market disruption. 2. New provisions for base levels (not less than 6%). 3. Special provision for small and new suppliers and cotton textile exports. 4. Textile Surveillance board to monitor bilateral agreement.

MFA 2	1978-82	Same as MFA 1	<ol style="list-style-type: none"> 1. Same as MFA 1 2. Provision for 'jointly agreed reasonable departures' which permitted derogation of MFA requirements (base levels, growth rates and flexibility provision).
MFA 3	1982-86	Same as MFA 1	<ol style="list-style-type: none"> 1. As MFA 1 ('reasonable clause' deleted) 2. Introduction of 'anti surge' procedure to 'sharp and sustained growth within quotas.
MFa 4	1986-91	Coverage extended to cover vegetable fibers (flax and ramie) and silk blends. MFA now excludes only hair fibers and other minor fibers (such as coir, sisal and jute) already trade in substantial quantities.	<ol style="list-style-type: none"> 1. As MFA 1 ('reasonable departures' restored, albeit modified). 2. Some tightening of unilateral controls (Article 3) 3. Special treatment for 'least developed' and wool textile exporters. 4. Commitment to scrap under utilized quotas.

Source: Finger and Olechowaki (ed.), *The Uruguay Round A HandBook on the Multilateral Trade Negotiations*, A World Bank Publication

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THE SOCIO-ECONOMIC PROBLEMS OF WOMEN WORKING IN LEATHER GARMENT FACTORIES IN LYARI

By

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1. Introduction

In almost all types of social systems women enjoy specific status which helps them to determine their place in the social set up where they live. In the past when the women were considered to be subservient to men, they had certain specific role to play and enjoyed some status which was confined within the four walls of their abode. This status and role was to serve and please their menfolk, look after their children and perform the domestic chores. They were not supposed to work outside home for wages nor were they expected to stand with menfolk as of equal status. Their status, however, was secondary to menfolk and they were not allowed to speak or consider themselves to be equal and talk about their problems or even the pains of their drudgery.

Our society is male dominant society and the male is usually the head of the family and is supposed to be the provider and protector of the family. His control over the

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members of the family is strong and he dominates over all the decisions in the family. Actually he is considered as an omnipotent symbol of the family.

In almost all religions and cultures man holds the dominant position and the woman is considered to be weaker and dependant person who lacks the ability to take independent decisions, and remains in the secondary position in the society. Religion of the primitive societies also recognized the supremacy and dominance of menfolk. In Hinduism man is considered so strong as to be worshipped and some factions of Hinduism worship the man in the form of god of power and valor. Symbolically the virility of man is also worshipped by certain sects of Hinduism.

With the advent of Islam, however, the primitive customs and cultures and prejudices started fading away and superstitious practices in the name of religion were given up by the believers and followers of Islam. In the South Asian sub-continent also this change brought a different outlook, particularly, in the status and role of women.

Islam raised the status of women. Islam recognized the importance of women as an integral part of social and familial life. she is not only the essential partner of man but also an important factor of human life. she is responsible for the progeny and continuation of human race. Islam considers woman an honorable and respectable human being and almost equal to man, and grants all human rights to her.

Islam, has allowed legal rights to women as to men. She is free to adopt any profession or trade for her living. She could go into business or industry if she desired so, and legally she has this right and no man can challenge her for her getting into

any occupation or profession and she has legal rights to spend her own income in any manner which suited her.

Studies indicate that women in Pakistan are coming forward to get themselves into various types of income-generating activities. Unlike the past when they worked only under stress or pressure of adverse circumstances, today they strive for careers and are engaged in occupations for the sake of performing their role in the economic development and raising their standards of living, and for better future of their children.

A case study of status and Problems of women in Leather Garments Factories of Lyari:

This study was done in Lyari, one of the oldest coastal suburb of Karachi. The study was aimed at highlighting the problems of the married women of Lyari who work in leather factories.

Lyari is one of the oldest squatter settlement which is ever slummy even from its very existence in the remote past. It is situated nearer to the coastal line of Karachi and, being nearer to the sea port, it is inhabited by a population which is mostly engaged in fishing in one way or the other. People engaged in other occupations also live there. After the partition of the Indian Sub-Continent, it became inhabited by all types of people from all over Pakistan, especially, the displaced persons who came from across the borders or those who were the original inhabitants of Karachi and were displaced from their ancestral land for the sake of civic development of Karachi which was growing into a mammoth city from a small coastal town.

Lyari also has grown tremendously and today it is virtually a small town of its own with various trades and

industry. Beside fishing, it has now industries like leather industry, garment industry and other small-scale industries. The leather industry is one of the major industries of Lyari. Several tanneries are in Lyari and produce leather in its finished form for home consumption as well as export.

The leather industry in Lyari, though old enough, is still in infancy and is considered as a small-scale industry. It employs women who work in these industries at various stages of leather processing including the leather garment manufacturing.

Findings of the study:

- (i) The study indicates that out of a random sample of 57 married women, majority of them (45.61%) were in the prime of their age (31 - 35 years). This indicates that the women who worked were mature and had taken up the work consciously and willingly.
- (ii) Except (8.77%) all of them were literate.
- (iii) They had nuclear families (64.91%) and
- (iv) 70.18% earned individual income between Rs. 1001-2000 per month, while their husbands in majority (57.89%) earned the same income as their wives did. This indicates that both partners earned almost equal income and thus equally shared the burden of running their family.
- (v) The nature of their work in the factory was varied, perhaps according to their skills and training. The table below indicates the actual nature of their work.

Nature of Work

No.	Types of Work	Freq.	%
1.	Packing	6	10.52
2.	Machine Operation	0	00.00
3.	Cleaning Leather pieces	8	14.04
4.	Stitching button on the Jacket	6	10.52
5.	Cutting of Jackets	8	14.04
6.	Pasting solution on Jacket	7	12.28
7.	Sewing the Jacket	22	38.60
Total		57	100.00

This table indicates that the majority (38.60%) of the women worked on the sewing machine. In spite of the fact that they were not trained in stitching yet they did it.

- (vi) The study further indicates that most of these women (63.16%) had been working for 4-6 years, while at least (8.77%) had been working for 7-9 years. This again indicates that the majority had been working for the last 4-6 years.
- (vii) Majority of these women worked due to economic problems, 21 (36.84%); while 20 (35.09%) worked to meet the personal and children's needs. In fact desire of those who work always had been to work for economic reasons for themselves and their children's needs. The following table indicates the major causes which motivate these women to work.

Reasons for Work

Reasons	Freq.	%
Financial Problems	21	36.84
Family	16	28.07
Personal needs	00	00.00
Compulsion	00	00.00
Self and children's needs	20	35.09
Total	57	100.00

(viii) As regard other problems faced by these women at work, the survey has indicated that they feel lots of difficulties and disadvantages while working. They have to sacrifice their time and energy yet they do not get the return worth it. They face transportation problem, (12.28%), could not get leave even when they are sick or their children are sick (14.04%), but their most distressing problem was the deduction of wages on taking leave (73.68%). The following table indicates the picture.

Problems faced during job

Problems Faced	Freq.	%
Transportation	7	12.28
Leave	8	14.04
Security	00	00.00
Deduction of wages on taking leave	42	73.68
Non-cooperation of colleagues	00	00.00
Total	57	100.00

- (ix) This indicates the nature and extent of the problems these women face while working in the leather factories. It is evident from the nature of these problems that the employers do not provide any fringe benefits to their women employees, not even the facility of leave with pay when they get sick. Beside these problems there are other problems and handicaps as well like getting maternity leave without pay, lack of facilities for children's education or arrangement of day care facility for children when the women are at work. They also complain of long hours of work and inadequate facilities of over time wages.
- (x) The women feel that they are getting fewer return from their work than the labour they put in their work at the cost of neglect of their children and the family. They have no health facilities and remain sick most of the time. Due to noise of machines mostly they suffer from severe attacks of headache and nausea. Asthma is also quite prevalent among them who work in leather factories due to bad smell of leather and dingy atmosphere in the factories.
- (xi) The women, however, pointed out during the survey that definite rules and regulations should be framed and the employers must be compelled to follow the regular labour laws as promulgated by the Govt. They should also get the facilities allowed under the labour laws. The following table indicates the suggestions given by them in this regard.

Facilities to be given

Facilities	Freq.	%
Leave should be allowed with pay	7	12.28
Safety against accidents	17	29.82
Maternity leave with pay	27	47.37
Festival allowance	06	10.53
Total	57	100.00

Conclusion:

In conclusion it may be pointed out that the women in general and those who work in the leather factories in particular are great sufferers though they contribute a lot towards the economic development. The Government should recognize the contribution of such labour force comprised of married or unmarried women and should include them in the regular labour force of the country and the same labour laws should be made applicable to them as it in case of the male labour force.

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