THE GENDER AND POVERTY NEXUS:
ISSUES AND POLICIES

M.G. Quibria*
November 1993

* Head, Center Services Unit, Economics and Development Resource Center, Asian Development Bank. An earlier draft of the paper was presented in a policy seminar on Asian poverty, held in Kuala Lumpur in July 1991, jointly organized by the Asian Development Bank and the World Bank. The author has benefited from exchange of ideas with the participants of the seminar, in particular, Noeleen Heyzer, Manny Jimenez, Ravi Kanbur, Michael Lipton, Dipak Mazumdar and Martin Ravallion. The author also acknowledges beneficial discussions with or helpful comments from Jere Behrman, S. Behuria, J.M. Dowling, Jr., Paul Gertler, W.T.C. Ho, J.S. Lee, O.P. Mathur, E.M. Pernia, F.B. Rana, M.S. Rao and Salim Rashid. However, none of the above are responsible for any remaining errors and shortcomings of the paper. The author is also indebted to Ma. Lourdes Antonio who cheerfully processed various versions of this paper. The opinions expressed in the paper are strictly those of the author, and not of the Asian Development Bank.
Asian Development Bank
P.O. Box 789
1099 Manila
Philippines

©1993 by Asian Development Bank
November 1993
ISSN 0116-273x

The views expressed in this paper are those of the author and do not necessarily reflect the views or policies of the Asian Development Bank.
Foreword

The Asian Development Bank Staff Paper Series presents the results of selected preliminary research undertaken by the Economics and Development Resource Center. It is designed to stimulate discussion and critical comment on socioeconomic issues facing the developing countries of Asia and the Pacific. It is hoped that in some small way the discussion generated by the series will increase our understanding of the development process in the region.

S. C. Jha
Chief Economist
Economics and Development Resource Center
Abstract

Despite impressive growth in Asian developing economies in the last two decades, the vast majority of the world’s poor live in this region. According to one estimate, about 750 million – 800 million poor inhabit this region. Given the magnitude of the problem, poverty alleviation has become almost synonymous with economic development for most poorer Asian economies. While efforts are being made to alleviate poverty, it is being increasingly argued that, as there is a gender dimension to the poverty problem, these efforts should be gender focused.

This paper critically reviews the existing theoretical and empirical literature on the gender and poverty nexus. The data and the empirical studies reviewed in this paper are drawn essentially, but not exclusively, from Asian developing countries. On the basis of this review, the paper examines the conceptual basis for a gender-focused approach to poverty alleviation and the types of programs and policies required to achieve this objective. It appears that there are two lines of arguments being advanced for this gender focus.

First, it is argued that women are poorer, and more deprived, than men. Therefore, there is a need for gender focus for reasons of equity. A related but distinct argument which is made in favor of special intervention for the female poor is that gender-neutral policies bypass the female poor because of additional economic, social, cultural and informational constraints facing them.

Second, even if women are equally poor as men – that is, there is no sense of special deprivation – one can justify greater social sector investment targeted toward women than men if the social rate of return on investment in women is higher than that in men. This argument makes a case for greater social investment in women – in their health, nutrition, education and training – on account of efficiency. The implicit assumptions behind the efficiency argument are that there is a market failure which leads to a sub-optimal allocation of investment in health, nutrition, education and training, and that the problem of sub-optimality is more acute when it comes to investment in women vis-a-vis men. The main thrust of the efficiency argument is that there is a rationale, and indeed a compelling one, for government intervention in the social sector, particularly when it comes to social sector investment for women.

The arguments for public intervention in favor of women are essentially empirical. Therefore, the validity of the above arguments needs to be judged against empirical facts. Those facts differ from country to country. The magnitude of relative deprivation of women (vis-a-vis men) is likely to be different between countries. Similarly, differentials in social returns on investment in women relative to men may vary from country to country.

The nature of policy intervention is likely to vary from country to country. The nature of policy intervention depends inter alia on the type of market failures and the sources of deprivation. The sources of deprivation of the female poor are likely to be different, notwithstanding some measure of commonalities, across countries. In some countries, they may be essentially sociocultural; in others, they may be predominantly economic. And even in terms of economic causes, the sources may be different, requiring different types of interventions and remedies. Similarly, all countries, both developed and developing, experience some measure of market failures, especially when it comes to social sectors. In all countries, governments undertake public investments in social sectors presumably, among other things, to remedy these market failures. While it is being increasingly
acknowledged that many female-focused projects have higher social returns, the differentials in returns will vary across countries. Likewise, different investments in female projects will have different social returns within the same country. As a consequence, the emphasis on public investment in social sectors, as well as its composition, will vary from country to country depending on the variations in social, economic and political developments.

An important point that emerges from the present review is that many assertions about gender and poverty are not nearly as obvious as some people claim, nor are they universally applicable. The empirical foundations of many of these assertions remain fragile due to the dearth of gender segregated data. Indeed, a good part of the current literature is based on folklore, more on anecdotal evidence than on rigorous empirical analysis.

Be that as it may, if the objective is to ensure gender equity – to ensure equality in the level of welfare between sexes – as the lesson of history tends to indicate, public policy has to play an important role. In this connection, it may be noted that the concept of equity between sexes has a much broader connotation than equality in the levels of income or in the labor force participation ratio. Equity in this broader sense would require pursuing gender-focused policies that eliminate gender discrimination but at the same time preserve the basic values and norms of individual societies. While gender-neutral growth-oriented policies cannot effectively alleviate all types of discrimination against women, they may lay the groundwork for change. However, if the goal is to alleviate poverty – be it male or female – there is strong evidence that sustained growth is extremely effective in combating poverty.

Finally, it appears that much of the gender disparity stems from inequity in the intrahousehold allocation of resources, an area which cannot be directly influenced by the government. The rules of intrahousehold allocation are shaped perhaps partly by economic forces, and partly by norms and values of the society. While economic forces can be manipulated by government policies, the norms and values do not change swiftly and easily in sympathy with government policies. In this sense, some aspects of gender disparity are much more resilient and somewhat disappointing to deal with as far as public policies are concerned.
Table of Contents

I. Introduction 1

II. Equity Argument for a Gender-Focused Approach 3

III. Causes of Greater Poverty for Women 10
   A. Access to Land 13
   B. Access to Employment and Labor Market Conditions 13
   C. Access to Capital and Other Related Inputs 18

IV. Efficiency Argument for Greater Investment in Women 19

V. Policies to Reduce Gender Disparity 22
I. Introduction

Despite impressive growth in Asian developing economies in the last two decades, the vast majority of the world’s poor live in this region. According to one estimate, about 750 million – 800 million poor inhabit this region. Given the magnitude of the problem, poverty alleviation has become almost synonymous with economic development for most poorer Asian economies. While efforts are being made to alleviate poverty, it is being increasingly argued that, as there is a gender dimension to the poverty problem, these efforts must not be gender neutral. In other words, there is a need for specific gender focus in programs and policies directed toward the poor.

There are two lines of arguments being advanced for this gender focus. First, it is argued that women are poorer, and more deprived, than men in a number of senses, to be explained later. Therefore, there is a need for gender focus for reasons of equity. A related but distinct argument which is made in favor of special intervention for the female poor is that gender-neutral policies bypass the female poor because of additional economic, social, cultural and informational constraints facing them. Notwithstanding the apparent popular appeal, the cogency of the equity argument in favor of gender-focused policies needs to be closely scrutinized. It is argued that if alleviation of poverty is the objective of public policy, then it would be more efficient to address the poverty problem (the outcome) directly than to address it indirectly through gender (the characteristic or the cause).

The argument for the indirect characteristic-based gender-focus approach is based on two premises.

The first relates to the information problem. It is assumed that information about the incidence of poverty insofar as individual cases are concerned is imperfect. This information problem gets compounded if poverty is interpreted as a multi-dimensional disadvantage rather than a single dimensional disadvantage. In other words, if poverty is interpreted as not only low income or consumption, but also inadequate nutrition, health care, education and transport, we are then faced with information problems of a much greater magnitude. The second premise relates to the moral hazard problem – that is, people change their behavior to qualify as poor and receive public support. For example, individuals may decide to forego income-earning opportunities so as to obtain benefits from welfare programs.

---

1 See World Development Report 1990.

2 The World Development Report 1990 (p. 7) went so far as to argue that the fundamental issue in economic development is poverty alleviation.

3 The term "gender" has undergone significant redefinition over the years. While the term has originally implied the biological differences between men and women, it is now being increasingly used to refer to all aspects of social, political and economic differentiation due to gender.

4 Gender issues have figured increasingly in mainstream economics only in recent years, partly due to the advent of feminism in the western world. Although historically gender issues have generally been relegated to the background in the economic literature, it received some attention in the 19th century in the context of the campaign for female suffrage. Mill (1878) advocated the principle of perfect equality between men and women, not only within the family but also outside the family, in employment "hitherto retained as the monopoly of the stronger sex". Engels (1884), the high priest of marxist economies, attributed the subjugation of women to the development of capitalism. He argued for the participation of women in wage labor and advocated socialism as a means of emancipation for women. The belief that fuller participation of women in employment outside the home was the key to gender emancipation - though somewhat simplistic - was shared by a wide diversity of social commentators.
targeted toward the poor. Therefore, the equity argument is essentially based on the presumption that the process of identifying the poor indirectly through well-established correlates such as gender may involve less error than the direct method of observing poverty. Hence, the equity argument in favor of gender-focus policies stems essentially from considerations of imperfect information and moral hazard.

Second, even if women are equally poor as men—that is, there is no sense of special deprivation—one can justify greater social sector investment targeted toward women than men if the social rate of return on investment in women is higher than that in men. This argument makes a case for greater social investment in women—in their health, nutrition, education and training—on account of efficiency. The implicit assumptions behind the efficiency argument are that there is a market failure which leads to a sub-optimal allocation of investment in health, nutrition, education and training, and that the problem of sub-optimality is more acute when it comes to investment in women vis-a-vis men. The main thrust of the efficiency argument is that there is a rationale, and indeed a compelling one, for government intervention in the social sector, particularly when it comes to social sector investment for women.

As the preceding discussion implies, the arguments for public intervention in favor of women are essentially empirical. Therefore, the validity of the above arguments needs to be judged against empirical facts. Those facts, as is expected, differ from country to country. The magnitude of relative deprivation of women (vis-a-vis men) is likely to be different between countries. For example, the degree of relative deprivation for women may be more acute in Bangladesh than in the Philippines. Consequently, the need for special intervention on behalf of women for reasons of equity may be more compelling in Bangladesh than in the Philippines. Similarly, differentials in social returns on investment in women relative to men may vary from country to country. The differential may be much higher in poorer Nepal, with low female education and poor health status, than in Thailand, with high female education and reasonably good health status. As a result, the force of the efficiency argument in favor of gender-specific policy differs from country to country.

In addition to the magnitude, the nature of policy intervention is likely to vary from country to country. The nature of policy intervention depends inter alia on the type of market failures and the sources of deprivation. The sources of deprivation of the female poor are likely to be different, notwithstanding some measure of commonalities, across countries. In some countries, they may be essentially sociocultural; in others, they may be predominantly economic. Even in terms of economic causes, the sources may be different, requiring different types of interventions and remedies. Similarly, all countries, both developed and developing, experience some degree of market failures, especially when it comes to social sectors. In all countries, governments undertake public investments in social sectors presumably, among other things, to remedy these market failures. Public investment projects can either be gender-neutral or female-biased. While it is being increasingly

---

5 However, gender cannot be the sole criterion for government transfer policies, as this will qualify too many people for the transfer. The criterion of gender needs to be supplemented by other criteria which are more selective. This, however, will make nongender characteristics more decisive in the determination of the transfer.

6 Needless to emphasize, the extent of gender disparity may significantly vary across different regions in the same country. This is especially true of countries where regions are spatially separated, such as the Philippines. Also, significant gender disparities are often discernible across rural and urban areas.

7 This is not to deny that there is often a complex interaction between sociocultural and economic forces.
acknowledged that female-focused projects have higher social returns, the differentials in returns will vary from country to country. Likewise, different investments in female projects will have different social returns within the same country. As a consequence, the emphasis on public investment in social sectors, as well as its composition, will vary from country to country depending on the variations in social, economic and political developments.

The organization of the paper is as follows: Section 2 lays out the equity argument in favor of gender-focused approach to poverty alleviation. In particular, it describes the various senses in which the female poor are poorer than the male poor. It then briefly recapitulates the empirical evidence from various Asian economies. Section 3 analyzes the causes of this greater relative poverty and the possible remedies. Section 4 elaborates the efficiency argument for greater investment in female projects, with evidence from Asian Development Bank's developing member countries (DMCs). Section 5 discusses the effectiveness of various public policies to eliminate gender disparity. The paper ends with some concluding remarks, which are presented in Section 6.

II. Equity Argument for a Gender-Focused Approach

The equity argument for a gender-focused approach is based on a presumption that women are poorer than men. Then the question that needs to be answered: Are women actually poorer than men?

Any answer to this query is to be preceded by a definition of poverty. The term implies deprivation – the inability to attain a minimal standard of living. This minimal standard of living defines the poverty line for the society and divides the population into the poor and the nonpoor. But how is this minimal standard of living defined? This can be defined in terms of satisfaction of a minimum bundle of basic needs – for example, health, education and nutrition. The minimum standard of living can be expressed alternatively in terms of a summary indicator of welfare – a minimum consumption expenditure or income. Irrespective of the definition of poverty, women can be poorer than men in two distinct senses. First, there is a larger percentage of women as compared to men who are below the poverty line. Second, among the ranks of the poor, women in general suffer from a greater degree of poverty, as indicated by the depth of poverty. The depth of poverty indicates the income (expenditure) shortfall women have from the poverty line, when poverty is defined in terms of a summary indicator of income (expenditure).

The above discussion, of course, is postulated on an economic approach to determining poverty. Some have taken a more general approach, arguing that all relevant social and economic factors should be taken into account in determining one's economic status. According to this argument, poverty is not to be measured by an individual's income or

---

8 For a nontechnical discussion of the conceptual and measurement issues surrounding poverty, see Quibria (1991). For a more technical discussion of some of these issues, see Akinson (1987) and Foster (1984).

9 For a definition of income gap and depth of poverty, see Quibria (1991).

10 See, for example, Jodha (1989).
expenditure alone; there are other factors such as the nature and type of employment and the quality and character of one’s social and economic relations. Even if men and women have the same income but women have to do more arduous or inferior work, then women should be considered poorer. Similarly, if women enjoy less leisure than men – leisure being an important component of “full income” – then, even if men and women do enjoy equal income/consumption, women should be considered worse off in welfare terms. It is also argued that even if men and women have the same income/consumption, the same choice of leisure and employment, but women remain more socially, politically and psychologically constrained with limited freedom of participation in the society and the polity, then women should be considered worse off in terms of well-being as compared to men. However, this is a much broader perception of well-being – and poverty – incorporating aspects which are neither quantified nor quantifiable.

Poverty analysis in the context of gender creates additional conceptual difficulties. One such complexity relates to the unit of analysis. In general, poverty incidence is calculated in terms of households. To address the question whether women are poorer than men, one approach is to compare incomes between households headed by females and households headed by males. The other approach is to compare the living standards of individual men and women in the family context. The latter approach is defended on the ground that in any poverty analysis, the unit of analysis should be the individual as it is basically an enquiry into the issue of the welfare of an individual. It is argued that there may be unequal standards of living between members of the same household. Accordingly, the consumption standards of male and female members of the family are compared to determine whether the female members are poorer than male members.

Finally, it may be noted in passing that Sen, in a series of research contributions, has argued that an individual’s well-being should not be viewed in terms of “possessing of commodities,” which has only “derivative” significance. According to Sen, well-being should be seen in terms of people’s achievement – what he call “capabilities” – those attributes that contribute to one’s quality of life. These attributes relate to being able to live long, being well-nourished, being healthy, being literate and so on. According to Sen, while income/consumption is important as instrumental variables, variables that contribute to “capabilities”, but they do not provide a direct measure of well-being or living standard. Whether or not one entirely agrees with Sen’s concept of well-being, one can perhaps still agree with Sen that life expectancy, literacy and health are important indicators of well-being.

In light of the above discussion, we consider next whether women are in a sense poorer – having a lower standard of living – than men in the DMCs. It must be noted at the outset that due to lack of reliable gender-segregated data, very few generalizations can be made. However, an important indicator of well-being on which data are relatively more easily available is life expectancy. If an absolute standard of equality is taken as the basis for comparison, women are then unequivocally poorer than men in the poorest countries such as Bangladesh and Nepal, in terms of life expectancies (Table 1). However, to adopt an absolute standard of equality is a wrong basis for comparing life expectancies for men and women, as the latter are biologically destined to have a longer life span, given no gender inequities. Indeed, with equal consumption opportunities, women would encounter lower

---

11 See, for example, Sen (1985).
Table 1: Women in Development

<table>
<thead>
<tr>
<th>Country</th>
<th>Females as a Percentage of Males*</th>
<th>Female Adult Literacy Rate (as Percentage of those 15 years and older)</th>
<th>Women in Labor Force (as % of Total Labor Force)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>99</td>
<td>47</td>
<td>7.0</td>
</tr>
<tr>
<td>China, People's Rep. of</td>
<td>105</td>
<td>73</td>
<td>76.0</td>
</tr>
<tr>
<td>India</td>
<td>101</td>
<td>55</td>
<td>34.0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>106</td>
<td>81</td>
<td>66.0</td>
</tr>
<tr>
<td>Korea, Rep. of</td>
<td>109</td>
<td>94</td>
<td>51.0</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>106</td>
<td>83b</td>
<td>81.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>106</td>
<td>81</td>
<td>45.0</td>
</tr>
<tr>
<td>Myanmar</td>
<td>106</td>
<td>81</td>
<td>60.0</td>
</tr>
<tr>
<td>Nepal</td>
<td>98</td>
<td>35</td>
<td>51.0</td>
</tr>
<tr>
<td>Pakistan</td>
<td>100</td>
<td>45</td>
<td>13.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>106</td>
<td>99</td>
<td>59.0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>106</td>
<td>89</td>
<td>59.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>106</td>
<td>94</td>
<td>88.0</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>107</td>
<td>91</td>
<td>88.0</td>
</tr>
</tbody>
</table>

* Figures are expressed in relation to the male average, which is indexed to equal 100. The smaller the figure, the bigger the gap; the closer the figure to 100, the smaller the gap; and a figure above 100 indicates that the female average is higher than that of the male.


mortality rates at all ages. For this reason, to infer about gender disparity, male/female life expectancies should be considered with reference to a relative standard of equality.

In the following, we attempt to make some inferences about gender inequities based on a certain criterion of a relative standard of equality. This relative standard of equality is provided by international reference lines (to be explained in a moment) for men and women. Figure 1 plots female and male life expectancies against per capita income for 1965 and 1988 in relation to an international reference line (based on the regression of a life expectancy variable against a polynomial in real per capita income for all countries in the world for which such data are available). In 1965, female life expectancies at birth varied considerably among DMCs, ranging from 40 years in Nepal to 71 years in Hong Kong. On the other hand, male life expectancies varied somewhat less, from 41 years in Bhutan to 64 years in Hong Kong and Singapore. As Figure 1.A indicates, the majority of the countries had female life expectancies at least six years above the international reference line. These countries include: China, Hong Kong, Korea, Malaysia, the Philippines and Sri Lanka. The remaining countries had two to eight years below the reference line. These countries include Bangladesh, India, Indonesia, Nepal, Pakistan and Papua New Guinea. As far as male life expectancies are concerned, the former group was substantially above the international reference line. Of the latter group, Pakistan was above it and India was on the line. The
Figure 1.A Cross-Country Regression for Female Life Expectancy at Birth in 1965 for Selected DMCs

Figure 1.B Cross-Country Regression for Male Life Expectancy at Birth in 1965 for Selected DMCs

Figure 1.C Cross-Country Regression for Female Life Expectancy at Birth in 1988 for Selected DMCs

Figure 1.D Cross-Country Regression for Male Life Expectancy at Birth in 1988 for Selected DMCs

latter group, thus, displayed a substantially large gender bias in favor of the males. Between 1965 to 1988, all countries experienced significant improvement in life expectancies at birth. However, in most cases these increases in life expectancies favored females more than males, the two exceptions being China and Hong Kong, where the increase in male life expectancies exceeded those for women. While there has been a general reduction in gender gaps in DMCs, in poorer countries like Bangladesh and Bhutan, male life expectancies still exceed those for females in absolute terms.

In terms of basic consumption, there is some evidence, though not conclusive, especially from India and Bangladesh, that indicates that intrahousehold consumption disparity exists between sexes against the female members of the household.\textsuperscript{13} However, there is no such evidence of a gender bias available from the relatively richer Southeast and East Asian countries.\textsuperscript{14} A related body of evidence exists on gender differences in child anthropometric status. The anthropometric status of a child reflects, at least in part, his or her food consumption status. Reflecting a similar pattern as that of basic consumption, studies on South Asia tend to find that boys enjoy superior anthropometric status, while those on other Asian countries do not confirm that such differentiation exists between sexes.\textsuperscript{15}

Food consumption and anthropometric status are correlated in significant ways with child mortality. While there is a significant differential in child mortality rates across developing Asia, a common trend that seems to run across South Asian countries, such as Bangladesh, Bhutan, India, Pakistan and Nepal, is that the mortality rates for girls under 5 exceed those for boys. Sen (1990a) has dramatized these gender differences in mortality by arguing that "Over 100 Million Women are Missing" in Asia: that is, if gender differences in mortality in Asia and North Africa were identical to those of sub-Saharan Africa, then there would be 100 million more women in the world than it is reported today.\textsuperscript{16} Sen argues that the bias against women in intrahousehold allocation accounts for a substantial

\textsuperscript{13} There is a burgeoning literature on the subject. The studies which indicate such disparities include Agarwal (1986); Bannehepra (1983); Behrman (1988 a and b); Chen, Huq and DeSouza (1981); Sen and Sengupta (1983); Sen (1984); and Taylor and Faruque (1983). The studies which provide evidence to the contrary include Basu (1987), Behrman and Deolalikar (1990); Dasgupta (1987); and Harris (1990). The paper by Pitt, Rosenzweig and Hassan (1990) in the context of Bangladesh, one of the more careful studies in this regard, provides some evidence of discrimination against females in the distribution of calories. However, they note that when account is taken of marginal energy expenditures, men undertaking energy-intensive work suffer a "tax" that exceeds that of adult females, indicating some discrimination against males by the household.

\textsuperscript{14} For the Philippines, Haddad and Kanbur (1990) investigated the issue of intrahousehold disparity in food consumption and calorie intake. They found no significant difference in the incidence of the undernourished among males and females, although the extent (depth) of undernourishment seems to be slightly higher among the females. For Thailand (as well as Côte d'Ivoire), Deaton (1989) made a similar investigation. However, he followed a different methodology, based on an inference from consumer expenditure rather than direct observation of intra-household allocation. Deaton (1989) starts with the assumption that for a given level of income, families with children will spend less on adult goods in order to purchase children's goods. If household purchasing favors boys over girls, smaller expenditure on adult goods would be made by families with boys compared with those with girls. In light of this simple argument, Deaton (1989) examines data from Thailand and finds statistically insignificant bias in favor of boys in Thailand.

\textsuperscript{15} For a sample of these studies for Asian developing countries, see Senauer, Garcia and Jacinto (1988) for the Philippines, and Senauer, Sahn and Alderman (1986) for Sri Lanka.

\textsuperscript{16} To arrive at serious quantitative estimates of "missing women," as Sen (1992, 124) has himself noted, requires "proper demographic models of births and deaths," with "clear speculation of the possible counterfactual scenarios." The simple Sen-type calculation, based on comparisons of the crude ratios of women to men in two populations, tends to exaggerate the number of missing women, since part of the lower life expectancies for men are due to behavioral rather than biological reasons (e.g., greater occupational stress, greater smoking and drinking, more meat, drugs and exposure to machinery).
part of this difference in mortality. This intrahousehold allocation encompasses a wide
gamut of resources, including food consumption, medical care and other health inputs.

As in food allocation, there is said to be similar inequities between sexes in relation to
medical care. Again, the available evidence suggests that as in food allocation, this inequity
is more prominent in South Asia than elsewhere.\(^17\) On morbidity, the available evidence
is sparse. Whatever little evidence is available, it nonetheless tends to reflect the earlier
noted pattern of gender disparity: females have higher morbidity in South Asia while there
is no difference in Southeast Asia.\(^18\)

In addition to consumption and health-related measures of economic welfare, education
remains an important indicator of welfare. Figure 2 shows that educational attainment, in
terms of years of schooling, reflects widespread inequalities in favor of men. These
inequalities are once again more acute in South Asia (except Sri Lanka), although they seem
to persist to a much lesser extent in Southeast and East Asia. In terms of literacy, men seem
to be ahead of women in all developing countries (see Table 1). The disparity in the literacy
rates between males and females seems to be more pronounced in poorer developing
countries, an exception being Sri Lanka.

The above provides some indications of gender inequities across DMCs in terms of
selected economic and social indicators. These indicators reflect individual differences in
economic welfare. However, if one takes a broader perspective of individual well-being as
being determined by economic and noneconomic factors including one’s level of
participation in society, then disparity in terms of traditional poverty indicators provides
only a partial basis for judgment. In many of these countries, it is argued that in addition
to the considerable disparities in economic indicators between men and women, there are
social and psychological factors which discriminate against women and limit their full
participation in societal activities.\(^19\) For example, women have often limited access to
employment opportunities, and even if they are employed, there is often a considerable
differentiation in the nature of jobs held by men and women. Women are generally engaged
in inferior jobs – which are unskilled, low security and provide less opportunity for
advancement. (However, when one is constricted to poor men and women, whether one can
make such a differentiation is an open question.) Accordingly, the welfare level being
enjoyed by women are lower than that by men. Moreover, as it is often suggested, women
have to work longer hours, as they engage in both wage and nonwage employment, the
latter usually consisting of household chores. As a result, it is argued that women suffer
from inequities in the consumption of leisure.

\(^17\) There is a large literature on South Asia regarding this issue. For a sample, see Chen, Huq and DeSouza (1981); Kynch
and Sen (1983); Taylor and Paruque (1983); Dasgupta (1987); Miller (1981); and Alderman and Gertler (1988). However, for
Southeast Asia, no such body of evidence exists that indicate gender discrimination against the females. Indeed, in a recent
paper, Deolalikar (1991) notes that there is very little gender difference in health care in Indonesia – and when it exists, it
favors girls.

\(^18\) The economic literature is rather sparse in this area. One can mention two notable papers in this respect – one on

\(^19\) Despite substantial variations across countries, it is widely acknowledged that women suffer from a unique set of
constraints, many of which tend to impinge on important dimensions of human freedom. These constraints stem partly from
biological factors, but mostly from societal values and traditions that tend to constrict women’s freedom in assuming her
productive role.
Figure 2.A Cross-Country Regression for Female Expected Schooling in 1965 for Selected DMCs

Figure 2.B Cross-Country Regression for Male Expected Schooling in 1965 for Selected DMCs

Figure 2.C Cross-Country Regression for Female Expected Schooling in 1987 for Selected DMCs

Figure 2.D Cross-Country Regression for Male Expected Schooling in 1987 for Selected DMCs

However, women often do not participate in the labor force for producing market goods. Table 1 indicates that the labor market participation rates for women are less than men in DMCs. Does this fact necessarily imply that women enjoy more leisure than men? There is no simple answer to this query. While the statement may be true of the affluent class, it is not necessarily true of the poor. Indeed, the lower labor force participation ratio may be reflective of the existing social and psychological barriers to female participation in the market as well as of the discrimination in the gender division of labor. As a matter of fact, it is argued that despite lower participation rate of women in the (market) labor force, women – especially poor women – work longer and engage in more arduous work (Bardhan 1993). Given these inequities in the allocation of leisure, women are relatively worse-off – in welfare terms – even if they are earning the same level of income.  

Finally, data limitations preclude a rigorous comparison of incomes between male-headed and female-headed households. Anecdotal evidence suggests that there is a substantial difference in income between these two types of households in South Asia. However, no such disparities seem to exist in Southeast and East Asia. As a matter of fact, there is evidence (Balisacan 1993; Krongkaew et al. 1993) that indicates that in some countries, such as Thailand and the Philippines, households headed by women may even have incomes higher than those headed by men.  

III. Causes of Greater Poverty for Women

The preceding analysis has provided some perspective as to the degree of gender inequities prevailing in DMCs. Needless to emphasize, not all aspects of gender inequities have been quantified nor are they amenable to quantification. Therefore, we shall be rather selective in our approach, concentrating on the economic dimension of the problem.

The most important economic aspect of gender disparity refers to income disparity. How does one explain this income disparity? The income of an individual is essentially the returns to the various assets (including human capital) he or she owns. Assume that an individual owns a bundle of assets \( a \) and the returns to the assets are given by \( r \). Therefore, his/her income is simply stated as \( y = a r \), which on differentiation yields: \( \nabla y = a \nabla r + r \nabla a \), a simple, but insightful, equation. It indicates that changes in an individual’s income may occur either due to changes in the individual’s resource endowment or due to changes in

\[ \text{An important point of Bardhan’s (1993) paper was to argue that females from rural poor households participate in the labor force to a great extent than their counterparts from the nonpoor households.} \]

\[ \text{In his study of rural poverty in the Philippines, to assess the relative contributions of various socioeconomic and geographical factors to the family’s poverty status, Balisacan (1993) ran a simple regression model for all rural households. The regression model yielded a number of interesting results, including one implying lower levels of income for households headed by males, all other factors being equal. He concluded that “this result contradicts the common perception that rural households headed by females tend to have higher incidence of poverty than those headed by males” (p. 89). In the case of Thailand, Krongkaew et al (1993) noted that “on average about 16.4 per cent of all rural households in the adjusted case (the case with a higher poverty line) have female heads and for the unadjusted case (the case with a lower poverty line) it is about 15.8 per cent, which in both cases are lower for the rural nonpoor” (p. 73). They, however, concluded rather circumspectly, ‘The data ... are not sufficient to conclude whether households with female heads are more or less likely to fall under the poverty line than households having male heads.” (p. 73).} \]
returns to assets. The equation may also be interpreted as implying that the disparity of incomes between two individuals can accrue from differences in asset endowments and differences in asset returns. Thus, if men and women have different incomes, they may be due either to differences in their assets (including human capital) or to differences in returns (discrimination).

The above provides an analytical framework that can be utilized for discussing the causes of greater poverty for women. Women as well as men operate within the context of a number of market and nonmarket institutions, including the family. To the extent that there are differentials between men and women in endowments of assets and their returns, they have to be explained in the context of these institutions. To do so, we shall organize our discussion in terms of the institutions including the various markets, such as those relating to land, labor and capital. But first, we shall discuss the issue of resource allocation within the household.

As has been noted earlier, there is a good deal of empirical literature, especially in the context of South Asia, which claims that there is a disparity in the standard of living within the household. It is claimed that greater resources are used up to meet the consumption, health, nutrition and education needs of the male members of the household. There can be two distinct explanations for this phenomenon. First, different individuals have different returns to investment and therefore, they have different impacts on the household welfare function. It is, therefore, argued that female members of the family have lower returns from expenditures on consumption and nutrition or on education. The male members participate in more physically demanding nonhousehold activities and therefore require greater nutrition. Similarly, the returns from education are greater for the male child than for the female child as far as the family is concerned. This is due to the fact that often the education skills acquired by the female members are nonmarketed. Moreover, even if they are marketed, the elder members of the family lose access to this stream of income when the younger female member is married off. This might explain the differential allocation of resources for education between male and female members of the family.

---

22 It may be noted in passing that earning differentials between men and women have serious implications for female poverty, if the unit of analysis is the individual. However, if the unit of analysis is the family, and if the family remains intact, wage differentials between men and women have no direct implications for sex differentiation of poverty.

23 For a recent survey of the literature, see Behrman (1992).

24 These types of explanations have been advanced, among others by Rosenzweig and Schultz (1982), Behrman (1988) and Pitt, Rosenzweig and Hassan (1990). The analysis assumes a unified preference function for the household. Such a unified preference function, as is well-known, exists if there is a dictator in the household whose preference prevails or everyone in the household has identical preferences. The essence of this argument can be formally expressed as follows with the help of a bare-bone model. Assume that the household utility function can be expressed as an additive utility function of consumption ($c$) and effort ($e$): $u(c, e) - v(c, e)$ where superscript 1 refers to the member male and superscript 2 refers to the female member of the household. It is further assumed that appropriate first and second order conditions hold with respect to $u$ and $v$. The wage level of individual $i$ is given by $w^i = w^i(c, e)$ where $w$ refers to the health of the concerned individual. The health status of an individual $i$ is assumed to be given by $h^i = h^i(c, e)$. The optimization problem of the family is now given by: to maximize $u(c, e) - v(c, e)$ subject to $h^i = h^i(c, e)$ and $w = w(c, e, h)$. The first order condition for maximization is given by: $\frac{\partial u}{\partial c} - \lambda \left[ \frac{\partial u}{\partial h} \right] = 0$ and $\frac{\partial v}{\partial c} + \lambda \left[ \frac{\partial v}{\partial h} \right] = 0$. The conditions imply that marginal benefit from consumption should equal marginal cost. Similarly, in equilibrium, marginal disutility from effort should equal the implicit wage level. Now, considering the first equation yields, simple differentiation: $\frac{\partial u}{\partial c} - \lambda \left[ \frac{\partial u}{\partial h} \right] = \lambda p_e$, where $p_e = \left[ \frac{\partial u}{\partial h} \right]$. If $\frac{\partial u}{\partial c} > \frac{\partial u}{\partial h}$, then $p_e < p_e$, implying further that $c_i > c_j$. The above essentially states that if consumption has different impact on the market wage rate, then the welfare impact of consumption will vary between individuals. The individual whose consumption will have a higher impact on the wage level will be allocated a higher consumption level.
Second, some have attempted to explain this phenomenon in terms of a bargaining framework. Spouses are assumed to have conflicting preferences and resolve them in a manner prescribed by some explicit bargaining models. The bargaining format has the advantage of considering within a single framework the elements of conflict and cooperation in a family. Spouses are altruistic to each other and share many important family concerns (especially with regard to the welfare of the children); at the same time they often have pronounced differences in preferences that may lead to conflicts insofar as intrahousehold resource is concerned. An important limitation of the bargaining approach is that it has been developed in the context of a two-member husband-wife family. Extending the framework to a multi-member family, including children, appears difficult. Unless it can be so generalized, its utility as a framework for explaining the sex bias in resource allocation appears questionable.

The underlying premise behind the economic explanations advanced above is the existence of "cool, calculating" parents, who make their decisions based on economic returns. Or in other words, it is the economic imperatives that propel parental decisions regarding intrahousehold resource allocation. As Sen (1990b) has noted, many scholars find them unconvincing — and try to explain disparity in intrahousehold resource allocation in terms of social conventions, taboos, etc. But then, one should not forget the fact that social norms and conventions, important as they are, often have grown out of utilitarian logic. If it is stark economics that underlies these social norms and conventions, one needs to probe deeper into the economic determinants of these norms and conventions — or perhaps, more generally, the prevailing social institutions that encompass these norms and conventions. If one takes such a broader institutional approach to the problem, the underlying economic explanations for the existence of such social institutions would obviously differ widely from those elucidated above.

---

25 See, for example, Manser and Brown (1980) and McElroy and Horney (1981). For a nontechnical survey of the literature, see Behrman (1992). The essence of a simple bargaining model can be expressed as follows. Assume that total resources of the family is given by x. These resources are to be divided between two individuals. Let the proposed division be \( x_1 \) and \( x_2 \), with \( x_1 + x_2 = x \). The Nash bargaining problem can be expressed as: To maximize \( \ln (x_1 - s_1) + (1 - \alpha) \ln (x_2 - s_2) \) subject to \( x_1 + x_2 = x \), where \( s_1 \) and \( s_2 \) are the fallback positions the two individuals have in the absence of the bargain, and \( \alpha \) indicates the bargaining strength of individual 1. The first-order condition for maximum yields: \( x_1 = s_1 / \lambda + s_2 \) and \( x_2 = (1 - \alpha) / \lambda + s_2 \), where \( \lambda \) is the Lagrange multiplier associated with the balance equation \( x_1 + x_2 = x \). From inspecting the expressions for optimal values of \( x_1 \) and \( x_2 \), it is obvious that the share of individual 1 and 2 are critically dependent on the values of their respective fallback positions as well as their bargaining strengths. While the above model can be made more realistic by incorporating more general assumptions, the principal economic implications remain unscathed.

26 Even if the nuclear household is appropriate, empirically testing the bargaining model is very difficult without experimental data (e.g., random distribution of assets). The available studies fall short of being persuasive since they do not control well for unobserved tastes and productivities (Behrman, 1994).

27 It may be noted in this connection that the application of this economic framework has been made mostly to intrahousehold allocation of food. In that context, it remains to be answered how the allocation is strictly policed and enforced, because it is the wife who is in charge of cooking and distributing. It seems that to the extent an inequality in intrahousehold allocation of food obtains, it is more the result of social norms and conventions, less that of bargaining within the household. Similarly, it has been noted in Taiwan and Korea that rural girls from poorer families often sacrifice their own education to take up employment in export-oriented industries. These girls then regularly remit money to parents so that brothers back home can get educated. It appears that this disparity in the allocation of resources for education between male and female members of the family takes place, not because of any discernable bargaining within the household nor because of the existence of any dictatorial preference in the family. In other words, in this context, what sisters are doing apparently on their own volition, is dictated by the existing social values rather than by economic forces.
Given the present state of empirical knowledge, it is difficult to judge the superiority of one explanation over the other. Nevertheless, the fact remains that in many poorer countries, the female members of the family may be more deprived in terms of their access to resources – for basic consumption, health, nutrition and education. Because of this deprivation, women become less prepared for nonhousehold wage employment and may find themselves discriminated against when they become involved in market transactions.

A. Access to Land

In agriculture, the most important asset is land, and access to land can spell the difference between poverty and affluence. In many countries, women seem to be more disadvantaged than men in the land market. This is evident from the fact that among the poor in South Asian countries, the percentage of landless women are higher than the percentage of landless men. This has much to do with the inheritance law of many of these countries, where the male children inherit most of the family land. But it may also reflect the bias in the working of the tenancy market. Female tenants are extremely rare as compared to male tenants. The landlords rent out land to tenants who are considered to be adept at land cultivation, physically strong to carry out many arduous farm tasks, have good knowledge about details of farming, possess some farm implements and have access to working capital (for purposes of cost sharing). Although many poor women perform some very arduous farm tasks, the general perception is that most women are not particularly suited to become tenants. Therefore, the inheritance laws and the general perception of the landlords tend to collude in such a way as to exclude women from having access to agricultural land. However, when women do have access to land, there is not much of an evidence that they are discriminated with respect to the terms of contract. The terms of contract are usually uniform across a particular village or locality, with little or no variations between tenants.

Many women, including poor landless women, are engaged in homestead agriculture. This includes vegetable and fish cultivation, poultry and livestock raising, tree plantation and crop processing. Most poor women have a small homestead but are often constrained by lack of technical information, extension services, credit and good seed. While poor men are also constrained by these resources, poor women are more so, especially in the context of traditional social environments of poor developing economies.

B. Access to Employment and Labor Market Conditions

Despite increasing participation by females, it is widely believed that women are generally more disadvantaged than men in the labor markets. In agricultural operations, women are being increasingly utilized, more in some countries than others. Previously, in many countries, women were assigned to specialized farm tasks. Increasingly, they are making inroads into operations, previously considered the exclusive domains for men. This

---

29 See Bardhan (1993).
30 However, in many export-oriented industries (such as electronics and garments) in the DMCs, some claim that females are advantaged.
segregation into different sectors of employment has much to do with the physiological and biological differentiation, their differential skills and training, and the sociocultural environment of the country. However, with increasing demands of economic development or the exigencies of poverty, the social environment is changing—perhaps faster in some countries than others. What was once considered a taboo is no longer considered as such with the change of the social environment and the value system. Physiological and biological differentiation, some aspects of which were accentuated by disparity in intrahousehold allocation of nutrition, health and education resources, is also going through a slow process of metamorphosis.

The service sector—both formal and informal—is gaining increasing prominence in many Asian economies. While the formal sector employees are not that much subject to poverty, the informal sector employees are. A good number of the informal sector employees are female. While it is difficult to compare the earnings of men and women due to unreliable data, it is possible that women suffer many more handicaps than men in the informal sector. These handicaps, in most instances, result in earning disparities and the segregation of women in particular jobs.

In most DMCs, the manufacturing sector remains at an early stage of development. A small portion of the total labor force, and of that, an even more minuscule portion of the female labor force, is employed in industries, in particular, in manufacturing. However, at the moment, the employment situation is undergoing rapid changes in most DMCs. As these economies pick momentum in growth, which is driven mainly by export orientation of manufactured output, both the employment share of industries and the female participation therein are on the rise. In parallel with the disparity in employment that exists between sexes in industries, data indicate a similar disparity in wages across countries in the Asia-Pacific region (Table 2). Given the wage disparity, the pertinent question that then arises is: how does one explain the earning gap?

In the following, we discuss briefly various theoretical explanations for the earning gap. Two types of hypotheses, one complementing the other, have been put forward. The first hypothesis is the so-called human capital theory, developed by Mincer and Polachek (1974), Polachek (1981) and others. According to this theory, women's lower wages are explained by lower levels of education and training acquired by women as well as their lack of continuous work experience, a factor which hinders accumulation of skills. Differences in human capital acquisition may stem from a number of sources—pre-market or in-market discrimination or differences in personal or household tastes or societal norms and values. In sum, the lower wages for women reflect lower skills of women vis-a-vis men. The human capital theory, which provides a consistent framework for explaining gender

---

31 As the survey results of the National Institute of Urban Affairs in New Delhi, India, reported by Mathur (undated), indicate, labor force participation by women are inextricably bounded with the issue of poverty. He noted that women from the poorer families are more likely to work to escape poverty compared to those from relatively well-to-do families. As men's incomes become regular and stable, it is found that women tend to become less interested in outside employment.

32 Many would consider traditional gender division of labor as a reflection of societal norms and values. Others may view it as reflective of basic economic forces prevailing in the society. Thus, according to Becker (1981), the traditional gender division of labor reflects comparative advantage: women specialize in household work where they have a comparative advantage and men in market production. In this view, the primary benefit from marriage stems from increased output due to specialization. At the same time, this traditional division of labor tends to affect women's productivity adversely—first by affecting the acquisition of market-specific human capital and second, by affecting women's attitude toward market-based work.
Table 2: Male-Female Wage Differentials, 1980-1986
(Per cent)

<table>
<thead>
<tr>
<th>Country</th>
<th>1980</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>99.4</td>
<td>103.9</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>77.7a</td>
<td>69.4</td>
</tr>
<tr>
<td>India</td>
<td>44.8a</td>
<td>..</td>
</tr>
<tr>
<td>Japan</td>
<td>43.6</td>
<td>41.3</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>45.1</td>
<td>50.1</td>
</tr>
<tr>
<td>Myanmar</td>
<td>86.1</td>
<td>97.3c</td>
</tr>
<tr>
<td>New Zealand</td>
<td>71.4</td>
<td>74.9</td>
</tr>
<tr>
<td>Philippines</td>
<td>61.3</td>
<td>..</td>
</tr>
<tr>
<td>Singapore</td>
<td>61.5</td>
<td>57.5</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>75.4</td>
<td>63.7a</td>
</tr>
</tbody>
</table>

.. not available.

a 1989.
b 1982.
c 1971.


differences in market outcomes, highlights the disadvantages suffered by women due to specialization in household work.33

However, gender differences in economic rewards are not fully explained by productivity differences; the second hypothesis of labor market discrimination can help explain the residual. But should any residual necessarily signify labor market discrimination? It is possible that the residual may only reflect an unmeasurable compensating differential, a possibility which, however, remains somewhat remote in an environment characterized by poverty and deprivation. It is contended that in a subsistence economy, people have a strong preference for pecuniary income over leisure and other nonpecuniary aspects of employment. In sum, the issues raised above concerning the income gap are essentially empirical - issues that cannot be answered on a priori theoretical grounds. Before attempting to shed some light on these issues based on the available empirical studies, we review

---

33 It can, however, be argued that lower pecuniary returns from specialization in household work does not necessarily mean lower welfare for women. If gender division of labor leads to increased output and if this output is equitably shared between both sexes in the household, then the traditional division may lead to increased welfare. In this view, however, lower labor force participation ratio for women as well as their earnings should not be attached any particular welfare significance. However, this conclusion needs to be qualified when applied to single women or if there is disparity in intrahousehold allocation of resources.
briefly labor market discrimination\textsuperscript{34} – its nature and the various theories that have been advanced to explain the phenomenon.

Labor market discrimination takes many forms. These include: wage discrimination - paying differential wages to equally productive workers; employment discrimination – hiring members of a favored group; occupational segregation – the assignment of members of different groups to different jobs; crowding – the confinement of the less-favored groups to the undesirable occupation; and statistical discrimination – selection of individuals for employment and training on the basis of attributes (such as gender) considered to be related to productivity.

There are at least four major explanations of the phenomenon of discrimination. Becker (1957) advanced his 	extit{tastes model} where he argued that firms enter the labor market with prejudicial tastes. These prejudicial tastes lead each firm to behave as if it is endowed with its own "market discrimination coefficient". This coefficient indicates the amount of premium it would have to be paid before it would be willing to deal with the members of the discriminated group. A pertinent question is whether such a model is applicable to sex discrimination as it is to racial discrimination. It is argued that people are unlikely to have a discriminatory taste between men and women who are in contact with each other in the family context. However, there is a notion of socially appropriate roles between men and women, an aspect not explicitly considered by Becker.

To the extent that there is a norm of socially accepted roles, occupations can be segregated, indicating crowding. For example, employers are often more comfortable hiring women as secretaries than as engineers – or in a more poverty context, hiring them as maids than as farm workers. Such notions of socially appropriate roles may contribute toward the process of gender discrimination.

Becker’s analysis is confined to wage discrimination and does not deal with other forms of discrimination. The most interesting and intriguing aspect of his analysis is his policy conclusion. He argues that discriminatory employers forego profit by discriminating against the most productive workers, and therefore, if there is competition, those who discriminate will be driven out of the market. In other words, the market provides a powerful antidote against discrimination and no public intervention is essential to redress discrimination. The prescription, however, seems to fly in the face of persistent discrimination in the market economies.\textsuperscript{35}

The crowding model, which is associated with the names of Bergmann (1971) and Madden (1973), argues that discrimination takes places in the form of excluding members of certain groups from certain types of employment. Those who are excluded from better jobs are crowded into lesser jobs. The crowding model does not allow for wage discrimination but leads to occupational segregation. If, for some reason or other, males and females are segregated by occupation, then workers in male jobs will in general have a relative wage advantage if the supply of labor is more abundant relative to demand for female than male jobs. This crowding of female occupations will widen wage disparities

\textsuperscript{34} For a survey of the literature on labor market discrimination, see Cain (1986).

\textsuperscript{35} Becker seems to have modified his opinion subsequently. As quoted by Cain (1986), Becker, in an article on discrimination in the \textit{International Encyclopedia of the Social Sciences} published 11 years after his book stated: "A few of the more extreme nineteenth-century advocates of a competitive market economy believed that eventually its extension and development would eliminate discrimination.... Unfortunately, this has not yet taken place; discrimination exists, and at times even flourish[c], in competitive economies, the position of Negros in the United States being a clear example".
between male and female jobs, if there is already a disparity to begin with, due to
differential endowments of human capital. In general, female jobs would carry lower wages
reflecting lower human capital investment or employer’s reluctance to investment in the
human capital of female employees.

The imperfect information model, which is associated with the name of Phelps (1972),
provides an explanation for statistical discrimination. Statistical discrimination, as this model
argues, creates the possibility of a self-fulfilling prophecy. If, for example, it is believed by
employers that women will quit more often, then women would be deprived from training
and promotional opportunities. This in turn will lead women to quit more often. As in the
tastes model, statistical discrimination would cause employers to prefer male to female
workers and this would in turn imply that employers would be willing to hire females only
at a wage discount.

The radical model, advanced among others by Reich (1971), sees the root of
discrimination in the capitalist system. It argues that capitalism thrives on divisiveness
among workers and one way to nurture this divisiveness is through the vehicle of
discrimination among different types of workers. According to this line of argument,
discrimination – including gender discrimination – can be done away with by a changing
of the larger social system.

In light of the above theoretical discussion, it would be interesting to find out the extent
of gender discrimination in the DMCs and the underlying causes behind this gender
discrimination. As we have indicated earlier, data indicate the existence of varying degrees
of disparity in wages/earnings between male and female in manufacturing in DMCs.
However, this disparity, as it should be emphasized, does not necessarily indicate the
existence of discrimination. To go beyond this conclusion with regard to disparity and to
arrive at a measure of discrimination, one needs more detailed gender-disaggregated data
that include richer details with respect to skills, attributes and employment history of the
employees than are often readily available.\footnote{An exception to this statement seems to be provided by Foster and Rosenzweig (1992) who estimate of the extent of
gender discrimination in the rural labor markets of India and the Philippines. They conclude that the significant wage
differentials between sexes that exist in India and the Philippines are the result of statistical discrimination, and not of taste
discrimination.}

Given this data constraint, while it is not possible to make many empirically meaningful statements, it may still be worthwhile to
enumerate the empirical questions that are important in this context. These questions
include: First, how much can this wage gap be attributed to discrimination as opposed to
differences in productivity-related factors? Secondly, to what extent does this difference in
productivity-related factors reflect discrimination, prior to the entry to the labor market?
Thirdly, what is the relative importance of different components of the gap – namely, wage
discrimination for the same job, discriminatory segregation of occupations and different
human capital endowments? While there are no available studies from developing Asia to
shed light on these issues, the empirical studies conducted in the developed countries may
be of relevance here. Some of the findings from these studies, as noted by Gunderson (1989),
are highlighted below:

a. The greater the number of variables used to control for differences in productivity-
related factors, the smaller is the productivity-adjusted wage gap to the unadjusted
wage gap.
b. When the gap is close to zero, it results from inclusion of control variables which might themselves reflect discrimination.

c. Factors originating from outside the labor market (e.g., differences in household responsibilities, type of education, career interruptions) are important sources of the overall wage gap.

d. Differences in the occupational distribution of males and females account for a substantial portion of the overall earnings gap. In contrast, pay differences for the narrowly defined occupation within the same establishment do not account for much of the gap.

e. Differences in pay across establishments account for a substantial amount of the earnings gap.

f. Productivity-adjusted earnings gaps tend to be smaller in the public than in the private sector. In the private sector, the discriminatory gap tends to be smaller when the product markets are competitive.

g. Being married has a differential effect on the earnings of men versus women. The gap is widest between married men and married women, suggesting that household responsibilities may have an important effect on the earnings gap.

h. Differences in labor market experience and the continuity of that experience, including the accumulation of company seniority, account for a substantial portion of the earnings gap.

i. While women have similar levels of education to men, the type of education women acquire are often not oriented toward gainful skills that are rewarded in the labor market.

j. Differences in preferences for certain types of jobs account for a substantial portion of the earnings gap, although it is difficult to determine to what extent these preferences are shaped by discrimination.

While the above findings may not necessarily apply to developing countries in their entirety, they are instructive. One lesson that seems to emerge is that a wage differential between genders or race should not be hastily attributed to labor market discrimination. However, a rigorous analysis of the issue requires a good deal more data than is usually available in many developing countries. If it is difficult to determine the existence of gender discrimination, it is even more difficult to test empirically the alternative theories of discrimination.

C. Access to Capital and Other Related Inputs

To make a successful bid as an entrepreneur, either in agriculture or in industry or in services, one needs access to capital. Most poor women, like poor men, suffer from lack of collateral. This deficiency is common to households with no male members. Even if women are allowed equal access to formal sector credit, they are likely to be more constrained than men in being able to take advantage of this access because of the high transactions costs associated with borrowing. This high transaction cost of borrowing (for example, having to commute to urban centers where formal sector Banks are located) derives from the multiplicity of the roles women perform and the time constraint they encounter due to household responsibilities. As a consequence, both because of lack of collateral and high transactions costs, women are often shut off from the low-interest formal financial institutions. Moreover, the lower educational attainments of the poor, especially of the
female poor, poses additional difficulties as most formal sector loans require processing of fairly complex application forms. In somewhat related manner, poor women are more constrained than poor men in terms of access to information – and perhaps also social connections, an important asset in a traditional economic environment. There are other social, religious and institutional restrictions which also constrain female access. In some countries, for the female to apply for a bank loan, one needs to have the application cosigned by a male member, father or husband.\textsuperscript{37} Such a discriminatory regulation does not, however, promote the cause of the female poor.

In terms of extension services in agriculture or other technical information facilities provided by the government, women are found to be more disadvantaged than men to access these facilities,\textsuperscript{38} at least in South Asia. A number of reasons have been cited for this poor access by women. Besides the cultural reasons why a man may prefer to talk to another man, there may be economic reasons, although they may not apply equally to all DMCs. Schultz (1989) cites one such reason. Schultz notes that governments often give priority to supporting cash crops for purposes of increasing exports and government revenue. And since these crops are often managed by males, Schultz argues, male farmers get high priority from government agents. In addition to these cultural and economic reasons, there may often be an inherent mechanism in the system that can help to perpetuate the existing biases. For example, as World Bank (1992) notes, in Indonesia, the spread of agricultural research results is targeted to 'lead farmers' who are expected to share their learning with other farmers. However, in reality few of those lead farmers are women. Hence, despite women's active role in agriculture, they are often excluded from direct access to extension services. As a result, women are more handicapped than men to undertake entrepreneurial activities in agriculture (such as home gardening) or in cottage industries. Finally, in many Asian economies, there is training for skill formation, essentially for industrial and service sector activities, offered by governmental and nongovernmental organizations. However, poor women are again often more constrained than poor men to take advantage of these opportunities, either because of the adverse social environment or because of additional household obligations.

IV. Efficiency Argument for Greater Investment in Women

It is often argued that social investments should be targeted more toward women than men, not only for reasons of equity, but more importantly for reasons of efficiency. It is contended that many social investments in women have higher (social) returns and should be preferred on account of accelerated growth compared to an equal investment in men. An investment in education, health, nutrition, and employment in women may be as productive in private terms as an equivalent investment in men. However, the former has more positive

\textsuperscript{37} Such practices seem to be more common in Muslim countries than others. Indeed, it was only recently that many developed countries abolished such discriminatory practices.

\textsuperscript{38} This gender bias in access has been noted among others by Baxter (1986), Boserup (1990), Saito and Spurling (1990), and Safilos-Rothschild (1990).
externalities to make it more preferable in social terms as compared to the latter. In this connection, it may be noted that casual empiricism indicates that countries that have achieved the fertility transition are those that have higher status of women in terms of access to health, education, and paid employment.

The beneficial impact of female education has been widely acknowledged. First, as noted by Schultz (1991a), among others, female education has a greater inhibiting effect on fertility than male education. This may be due to a number of factors: (a) children are more intensive in women’s time and the value of a woman’s time increases with education; (b) education may raise a woman’s age at marriage; (c) education may improve woman’s contraceptive efficiency; and (d) female education may endow women a greater control over fertility. Figure 3 shows some evidence from DMCs in this regard. As the figure indicates, gender gap in school (defined by male minus female schooling) is positively associated with population growth. While the relationship is somewhat weak, this is partly the reflection of a limited sample. Second, it is argued that parental education has a beneficial effect on child health – as it induces a greater use of health inputs such as food, health care and sanitation – but this beneficial effect is larger if education is extended to the mother than to the father. The change of attitude or the availability of greater information on the part of the mother has more direct impact on child rearing as the mother bears most of the responsibility in this regard. Third, an increase in female education and employment which results in higher female income, as opposed to male income, has greater impact on children’s health and nutrition. This has also been vindicated by village-level analysis. The explanation for this phenomenon is provided in terms of "maternal altruism". It is argued that maternal altruism toward children is stronger than paternal altruism, an idea widely accepted but difficult to test. Fourth, the education of a mother has more of a positive influence on the education and outlook of the child than that of a father. It derives principally from the fact that children are generally more attached to mother than father and spends more time with mother than father.

As in the case of education, there is a similar beneficial effect of the health and nutrition of a mother on the health and rearing of the child. Needless to emphasize, during pregnancy, the link between mother’s health and child’s health is a direct biological one. Malnourished mothers tend to give birth to low weight babies who are more susceptible to infant and child mortality. In addition, higher infant and child mortality rates often give rise to higher fertility rates in order to ensure the desired number of children.

It is also argued that improving the status of women through greater investment in their health, education, nutrition, skills and employment leads to an accelerated as well as a desirable pattern of growth. In this connection, it has been noted that women in many Asian countries are better savers than men. This may be partly due to a lower discount rate possessed by women, reflecting a greater concern for children’s welfare vis-a-vis men.

---

39 However, this argument has been subject to some criticism. It is argued that if female education reduces contagious diseases, then there is an externality, but it is far from clear whether more female schooling is the first-best solution to address this externality, as many contagious diseases are amenable to other types of effective control. But if the claim goes beyond contagious diseases, as it seems to be the case, then it is again far from clear whether one family member’s schooling improves the productivity of other members in producing better health is any more an externality to the household than it is to the firm if any worker’s better schooling increases the marginal productivities of other complementary workers.


41 For evidence from Bangladesh, see Hosрин (1984).
Another way to view this is as an intertemporal demonstration of the trait of maternal altruism. Similarly, it is argued that there is a variation in the pattern of investments by men and women. Investments by women are found to be more directed toward the health, nutrition and education of the children than that by men.

Finally, in most developing countries, especially those in Asia, there is a compelling rationale for investing in family planning. Most Asian developing countries have a high population base which is expanding at a rapid rate. High population growth rates have adverse economic consequences for individual households as well as the economy. An investment in family planning programs in women can help reduce population growth as well as contribute to improvement in the quality of children.

While many of the above arguments have some empirical basis, all the arguments may not have equal validity. Similarly, the validity of the arguments may also vary from country to country. Be that as it may, the improved status of women, arising from investment in health, nutrition and education of the female is a prerequisite for fertility transition. It also contributes toward the improvement in the quality of children and in the better economic status for the household. It is also contended that given conflicting interests, men’s and women’s earnings have different implications for the family’s, in particular, children’s welfare.

42 The importance of market failures as the basis for intervention on efficiency grounds is far from demonstrated satisfactorily empirically. Even when such market failures are indicated empirically, it does not necessarily follow that greater public investment is necessarily the optimal response. For example, it is unclear whether the kind of intervention to which attention is often directed regarding female schooling necessarily indicates a market failure for which female schooling is likely to be high in the policy hierarchy.
V. Policies to Reduce Gender Disparity

Income disparities, as noted earlier, stem from either disparities in resource endowments or disparities in the returns to assets. To the extent that the female poor suffer from disadvantages of both poverty and discrimination, efforts at alleviating female poverty need to address both these issues. As far as poverty alleviation is concerned, two distinct approaches can be identified. The direct approach, which encompasses various asset transfer programs directed at women, redress poverty through improving the asset-ownership position of women. The indirect approach that encompasses various programs and policies to improve the prevailing economic environment – through elimination of various market imperfections, through dissemination of information and through promotion of competition – seeks to improve growth in the economy and consequently the returns to assets owned by women – often consisting of labor only. Finally, to eliminate discrimination, one needs various anti-discrimination and affirmative action plans to ensure fair play and to reverse the adverse effects of the past. The following discusses briefly the various policies to address gender disparity.

As our earlier analysis indicates, women in many DMCs suffer from various types and degrees of gender disparities. While the important role of asset transfer in alleviating poverty, including female poverty is acknowledged, there is yet some controversy as to the nature of transfer to be undertaken. Some have argued in favor of lump-sum (cash) transfers to the poor, as contrasted from in-kind transfers. Lump-sum transfers have the advantage of being nondistortionary in terms of incentives and allowing individuals the freedom to make optimal decisions. Given that lump sum transfers preserve the option of buying the in-kind transfer on the market, it is argued that the former is superior from the point of view of consumers.\(^{13}\) However, an apparent disadvantage of the lump-sum transfers is that: what is considered individually optimum may not be socially optimum, at least as far as the satisfaction of basic needs is concerned. For example, individuals may use up transfers for luxury consumption (say cosmetics) than for education, the purpose for which the transfer is originally instituted. Another disadvantage of lump-sum transfers as a means of redressing gender disparity stems from the fact that individuals – especially female members of the family – do not have the full autonomy in decision making. To the extent that households pool resources, any monetary transfers targeted at women is likely to be surrendered, as any other resource, at the command of the family. If there is a pattern of disparity in the intrahousehold allocation of resources to begin with, this type of transfer would only reinforce the pattern. However, there is a contrary view which argues that the households do not have the kind of centralized control as envisioned above; indeed, all individual members have some command over the transferred resources. To the extent that households bargain over allocation of resources, targeted transfers help increase the recipient’s bargaining power over household expenditures. Therefore, despite fungibility of resources, targeted transfers may improve the economic status of women in household allocation, although indirectly, through enhancing their bargaining power.

On the other hand, in-kind transfers, while distortionary in terms of incentives, will be desirable to the extent that they may help to align an individual’s optimal choice to society’s

---

\(^{13}\) There is an emerging literature on the topic. See Munro (1992) and the references cited therein.
optimal choice. Secondly, in-kind transfers, which include education, health care and nutrition programs, are less fungible than cash programs. Although households may make some compensating adjustment, such behavior will lead to less than full adjustment which may have been the case if the benefits were purely lump-sum. Therefore, it is argued that in-kind transfers do not in any way contribute toward reinforcing an already existing disparity in intra-household allocation. Finally, to the extent in-kind transfers, particularly education, inculcate a sense of autonomy in an individual, they may improve one’s position in the household bargaining framework.\footnote{Critics of in-kind welfare payments contend that these programs are paternalistic. To the extent that these payments alter incentives, they create inefficiencies. This, in other words, means that the same level of welfare for the recipients could have been achieved at a lower cost to the government. Many economists find this paternalistic view of the government unacceptable, as it interferes with consumer sovereignty.}

In this connection, it is also debated whether transfers should be targeted to all poor or there should be special provisions exclusively for the female poor. The basic argument that is advanced for a general provision for all the poor is that one should not discriminate between the poor, based on their gender, if poverty alleviation is the objective. Those who argue for special provision targeted at the female poor contend that the female poor encounter additional social, cultural and religious obstacles that deter them from taking advantage of these opportunities, and therefore, there should be special provision for poor women.

As we have noted earlier, if experiences of developed countries shed any light on the situation prevailing in developing countries, much of the deprivation of women has to be traced, not in the discrimination at the market place, but in the differential endowment of assets (including education) in women. The latter often arises from disparity in intrahousehold allocation between sexes. There is limited scope for public policy to influence intrahousehold resource allocation directly. However, as argued earlier, better employment opportunities and outside earnings can improve allocation in favor of the wife. Similarly, for female children, as noted earlier, much of the disparity in resource allocation is due to differential labor market opportunities between male and female, an egregious duality which can possibly be eliminated by economic development and affirmative actions.

To address differential opportunities in the market place, one needs public policies to ensure equal employment opportunities, policies and assistance in the adoption of females in the labor market (day care, flexible working hour and education policies). In addition, one needs government policies to safeguard women from wage discrimination.\footnote{One should be careful in interpreting the evidence in this regard. Wage differentials in the labor market may simply reflect compensating wage differential. If this is indeed the case, no public action is called for.} In devising policies to ensure gender equity in the market place, one should take note of their market forces as well as the social and institutional reality. Given that there is limited scope for enforcing government policies in the rural areas in many developing economies, the issue of ensuring gender equity through public policies is somewhat moot as far as the rural female poor are concerned.

To reduce sociocultural barriers to access to publicly provided education and extension services, one needs greater involvement of women in these services. It is argued that these services are more effectively provided to women, if women are involved in the extension activities. For agricultural innovation, information is critical and there is substantial gender differentiation in information channels. The pattern of imitation is usually gender specific
males copy from males, females from females. As there are fewer female innovators, the public information channels of extension and education need to be gender-specific so as to mitigate the bias in private externalities.

In many DMCs, property rights, especially with regard to land, are poorly defined and discriminatory as far as females are concerned. This weak property right has a cascading effect in terms of women's right in the economy. There is a need for legal reform to ensure both equity and efficiency. The credit market has been a thorny area for women. To provide access to credit remains the key to poverty alleviation among the females. There is a need for specialized service for women geared to their needs. The experiment of Grameen Bank in Bangladesh in this regard is instructive.

Finally, while there is a need for direct gender-focused policies to alleviate female poverty, it is found that appropriate macroeconomic policies and accelerated growth can be conducive to alleviation of poverty including female poverty. In many developing countries, where export oriented-policies have been pursued successfully, poor women have benefitted immensely. For example, in Bangladesh, its success in garment exports has had a most beneficial impact in the form of employment for 500,000 women. This has perhaps done good to more women than any other single gender-oriented policy in the country. It may be noted that in many developing countries, export industries (such as garments and electronics) are often dominated by the female labor force. Therefore, the female poor are often the first to benefit from export-oriented industrialization.
References


Khoo, Siew-Ban. "Development and Women's Participation in the Modern Economy: Asia and the Pacific." Women's Economic Participation in Asia and the Pacific. (ST/ESCAP/610), Table 1.4.


