

*Divorced, separated and widowed female workers in rural  
Mozambique*

JOHN SENDER AND CARLOS OYA  
(School of Oriental and African Studies, University of London)

**January 2007**

# *Divorced, separated and widowed female workers in rural Mozambique*

## ABSTRACT

Compared to other rural women, a high proportion of female waged workers in rural Mozambique are divorced, separated or widowed. The paper explores the factors underlying this difference and establishes a significant relationship between labor market participation and female divorce or widowhood. The association is likely to work in both directions. Moreover, contrastive exploration suggests that divorced/separated women differ from non-divorced women in many other important respects: They tend to get access to better jobs; also, divorced and separated mothers are remarkably good at investing in their daughters' education compared to other mothers and to male respondents. The paper concludes by stressing the limits of regression techniques in teasing out causation and the interactions between variables, and by suggesting that policies to increase female access to decently remunerated wage employment could make a substantial difference to the welfare of very poor rural women in Africa and their children.

**Keywords:** Divorce, Labor Markets, Education, Africa, Mozambique.

**JEL classification:** C81, J12, J16, J43, O12, O15, O55, R23

## *1. Introduction*

In 2002/3, a detailed questionnaire was completed for 2,626 people working for wages in the rural areas and small district towns of three provinces in Mozambique. This was the first ever large-scale survey of the rural labor market in Mozambique. The characteristics of the 1,106 adult female respondents (aged 15-49) in this Mozambican Rural Labor Survey (MRLS) differed from the characteristics of the women captured in a nationally representative Demographic and Health Survey - also conducted in 2003 (DHS 2005). One particularly striking difference is that, in the MRLS, a remarkably high proportion of the female respondents (about 37 percent) are currently divorced, separated or widowed (Table 1). In contrast, only about 14 percent of all women in the relevant age group (15-49) in the DHS are currently divorced, separated or widowed (Table 2). An even smaller percentage of *rural* women (11.6 percent) in the DHS are divorced, separated or widowed .

In addition, the provincial distribution of divorced, separated and widowed women in the DHS is very different from that found in the MRLS. Thus, in the MRLS there is a very high incidence of divorced, separated and widowed women in Manica Province (46 percent). In the DHS, the incidence of divorced, separated and widowed women in Manica is *not* particularly high, just 10.4 percent, and is actually below the average national incidence (13.9 percent).<sup>1</sup>

[INSERT TABLES 1 AND 2 HERE]

This paper attempts to account for these remarkable differences in the results of contemporaneous surveys, but the aim of the paper is much wider. It seeks to explore in some detail the lives and employment prospects of divorced, separated and widowed rural women, because a great many extremely poor people in Sub-Saharan Africa, especially in Southern Africa, live in rural households that receive no regular support from a male spouse. In the poorest African households, the ratio of adult males to adult females is relatively low, or there are no adult males at all (David Stifel, David Sahn and Stephen Younger 1999: 25; John Sender 2002 and 2003; Richard Erlebach 2006: Figure 5.4).<sup>2</sup> In fact, the MRLS did capture precisely the types of household that national expenditure surveys in Mozambique have classified as extremely poor. For example, many of the MRLS households suffer from at least as much deprivation - measured in terms of lack of assets and inadequate education - as the *poorest* expenditure quintile of households surveyed by *Inquérito dos Agregados Familiares* (IAF, 2004) in the same provinces (John Sender, Carlos Oya and Christopher Cramer 2006b). Thus, an analysis focused on divorced, separated and widowed women in rural areas is likely to provide insights into extreme poverty that are directly relevant for policy debates on poverty reduction in Africa.

The obvious starting point for an explanation of the relatively high incidence of divorced separated and widowed women in the MRLS is to examine the difference between the MRLS sampling method and the methods used by DHS (and IAF). The MRLS was specifically designed to investigate labor market issues and *all* of the principal respondents were currently wage employed.<sup>3</sup> In contrast, DHS and IAF did *not* purposively sample women (or men) who were wage employed. The only other Mozambican survey that has exclusively focused on female wage workers found that the incidence of divorced and widowed women was as high (38 percent) as in the MRLS (Carin Vijfhuizen and Carla Braga 2003), suggesting that there is likely to be a relationship between marital status and patterns of labor market participation.

Moreover, the life histories of women collected as part of the MRLS research confirmed that marital status had a strong influence on the pattern of labor market participation. Many women told the researchers that they only become wageworkers following the death of or desertion by their spouse, or said that they left the labor market as soon as they married or began to cohabit.<sup>4</sup> Therefore, an important objective of this paper is to examine interactions between labor market participation and current marital status.<sup>5</sup> Since other attributes apart from marital status are also likely to influence girls' and women's labor market participation, including their level of education (discussed in Section 2), contingency tabulations, non-parametric tests and logistic regressions are used to analyze some of the most plausible interactions in Section 3 and in the Appendix.

The availability of decent wage employment may allow, or even encourage, some relatively well-educated women to “make the choice” of attempting to live without a male partner, as discussed in Section 4. However, other women are likely to become divorced or separated through no choice of their own. Instead, men may make the decision to leave their female partners if, because of biological factors over which women can have no control, their partners fail to give birth to a son or a sufficient number of children. This pattern of male behavior is apparent in the results of research in some OECD economies, which concludes that women who have given birth to a son are significantly *less* likely to become divorced and more likely to marry than women who have given birth to a daughter (Shelley Lundberg 2005). In addition, ethnographic work in rural Nigeria and Ethiopia suggests that a series of child deaths, or childlessness in a marriage, can precipitate divorce (Last Murray 1992; Dana Tilson and Ulla Larsen 2000). Section 4 uses the MRLS data to discuss the relationship between the birth histories of women, (the number and gender of the children they have produced), and their divorced /separated status.

Women, even relatively well-educated women, may also be unable to “choose” to enter the local labor market, if they live in a rural area in which the demand for female wagedworkers is low and stagnant.<sup>6</sup> Intuitively, in contexts where employment opportunities are scarce, poor women are more likely to be compelled to remain in relationships with men in order to survive. Thus, Section 4 also discusses the importance of another (demand side) factor that women cannot control, especially whether or not they live in, or have the resources to finance migration to, an area in which the labor market is dynamic.

Many divorced, separated and widowed women are extremely poor, as noted above. However, Section 5 highlights the fact that being divorced or separated does not necessarily condemn all of the rural women concerned, or their children, to poverty. This section distinguishes between the poverty implications of a) widowhood and b) divorce/separation. It focuses on reporting some important and perhaps surprisingly strong results concerning the relatively successful performance of Mozambican divorced and separated women in educating their children, and in narrowing the gaps between the education of their daughters and sons.

The paper concludes by emphasizing the limits of regression techniques and the methodological difficulties to be overcome in future research and then raises some questions for policy makers.

## *2. The Age Distribution and Education of Divorced, Separated and Widowed Women*

Women in their twenties and thirties are much more likely to be divorced/separated in the MRLS than in the DHS, although there are a significant number of divorced and separated teenagers in both surveys.<sup>7</sup> The proportion of divorced/separated women in the DHS only begins to get close to the proportion in the MRLS after women reach the age of forty.

Table 3 compares the incidence of divorce and widowhood across age groups in the MRLS and DHS. Unsurprisingly, widowhood is more common in the older age groups in both surveys, but it is important to emphasize the very much *higher* incidence of widowhood, even amongst teenage women, in the MRLS than in the DHS. In fact, the strikingly high incidence of widows in the MRLS, especially among

women in their fifties and over, accounts for much of the difference between the proportions of divorced, separated and widowed women in the two surveys.<sup>8</sup> Most of the older women (aged more than 60) in the MRLS are widows, suggesting a very strong correlation between labor market participation and widowhood in this age group. Figure 1 illustrates the large differences between the MRLS and DHS in the proportion of widows found in Nampula, Zambezia and Manica provinces.

[INSERT TABLE 3 AND FIGURE 1 HERE]

It is possible that the provincial distribution of HIV/AIDS mortality and/or the distribution of mortality in the civil war has affected the distribution of widows across provinces in Mozambique. Unfortunately, data on the provincial distribution of HIV prevalence, as shown in Table 4, are unreliable (Sender, Cramer and Oya 2005: 7-8). Nevertheless, these data do indicate relatively *low* prevalence in Nampula province (8.1 percent), which may account for the smaller proportion of widows found in that province in both the DHS and the MRLS. Manica appears to have a relatively high HIV prevalence rate (19.0 percent) and a correspondingly high proportion of widows in the MRLS (22.7 percent); but, in the DHS, there is surprisingly low proportion of widows (1.1 percent) in Manica. The *Trabalho do Inquérito Agrícola* (TIA) collected provincial data on adult rural mortality rates in 2002, also shown in Table 4. The TIA results confirm that Manica has experienced relatively *high* adult mortality in recent years and suggests that the low prevalence of widows in the DHS is anomalous.<sup>9</sup>

[INSERT TABLE 4 HERE]

The MRLS finds that educated women are *more* likely to be divorced and separated than less educated women. The DHS finds a similar relationship, if women with or without primary schooling are compared, but not if women with secondary education and beyond are considered (DHS 2005: 89).<sup>10</sup> In the MRLS, Table 5 shows that a

significantly higher proportion of divorced and separated women completed primary school than women who were not divorced and separated. The average number of years of schooling completed by divorced and separated women is also significantly higher than the average for other women. Widows in the MRLS, especially older widows, appear to have had very limited access to education.<sup>11</sup> Despite these statistically significant differences, it should be noted that the gap between the benefits women derive from three as compared to two years of schooling may not be very important, especially if the quality of education is low and uneven.

[INSERT TABLE 5 HERE]

However, it is reasonable to expect that the superior level of education achieved by the divorced and separated women in the MRLS results in a different pattern of labor market participation for these women compared to non-divorced/separated women and to widows. The following section of the paper investigates this issue.

### *3. Interactions between labor market participation, education and marital status*

The women interviewed in the MRLS work in a wide array of different types of occupation and enterprise, for very different wages. The relatively weak bargaining power of all these waged workers, but especially casual agricultural workers and domestic servants, means that many of them live on pitiful and irregular wages and receive few, if any, non-wage benefits. However, the MRLS also shows that some types of employer – typically larger employers with more access to capital - are able to offer decent jobs and significantly better working conditions to their female workers. An earlier paper has examined these differences, making a distinction between “good” rural jobs (in the agricultural and non-agricultural sector) and the most irregular, worst or “bad” jobs in the agricultural sector (Sender, Oya and Cramer



2006b).<sup>12</sup> The first hypothesis to be examined here is that the women who are working in “bad” jobs are likely to be *less* educated than other women in the MRLS.

Table 6 confirms that (relatively well-educated) divorced/separated women are more likely than (less educated) non-divorced/separated women to find “good” jobs, and that they are less likely to have to resort to the worst type of irregular job - casual agricultural wage labor for a few days a month.<sup>13</sup> This Table also shows that widows, the least well educated of all the respondents, are more likely to have a “bad” job than divorced/separated women. However, it is important to note that widows are relatively successful in obtaining “good” agricultural jobs; they are as successful as divorced/separated women and *more* successful than non-divorced/separated women. Their success suggests that acquiring a good job, especially a good job in agriculture, is *not* solely determined by levels of education, i.e. that some poorly educated women are able to find “good” jobs. This suggestion is supported by the results of logistic regressions reported in the Appendix.<sup>14</sup>

[INSERT TABLE 6 HERE]

Logistic regressions that control for years of education and age (among other covariates) suggest that marital status, i.e. both divorce/separation status and widowhood, has an independent and positive effect on the odds of obtaining a “good” job, especially in agriculture. At the same time, regressions trying to explain divorce/separation status show that the type of labor market participation (whether having a good or a bad job) has a strong effect on the likelihood of divorce/separation.<sup>15</sup> The relationship is complex and probably works in both directions, as women finding good jobs and being more educated can achieve an “autonomy” that is positively correlated with divorce/separation. Part of the

explanation for the finding that so many non-divorced/separated women are employed in “bad” jobs may be the fact that men (husbands or fathers) are preventing them from working in the better types of job; men fear that women will have the opportunity to meet larger numbers of male co-workers, if they commute to work in (large-scale) enterprises offering regular employment. Some additional data from the MRLS can be used to explore this explanation further.

The MRLS contains some information on the labor market participation of another, larger group of adult women (3,556 women aged between 15 and 64 years), who live in the same households as the female (and male) principal respondents.<sup>16</sup> Only about 15 percent of these women are divorced, separated and widowed, but these 532 women were more likely to be working *regularly* for wages than non-divorced/separated female household residents. When non-divorced/separated female household residents participate in the labor market, they are more likely than divorced, separated and widowed women to work only sporadically, often in “bad” jobs for neighboring farmers. These findings are consistent with the suggestion that patriarchal relations may be preventing women from traveling any distance to obtain regularly paid employment; they are reinforced by horrifying reports of male partner violence directed against Mozambican women who attempt to work regularly for wages (Kathleen Sheldon 2002: 156), as well as by other studies that analyze the physically violent consequences of men’s reaction to changes in the gender distribution of wage employment opportunities (Margrethe Silberschmidt 1999; Ross Macmillan and Rosemary Gartner 1999).

#### 4. Women’s “Choices”

The data in section 3 could be interpreted as suggesting that women who have completed relatively more years of schooling are able to ‘choose’ to reject male ideological domination and abusive treatment. The argument would be that more educated, confident women can and do choose divorce or separation and, for them, this choice is a feasible option *because* they are more likely to succeed in finding decent jobs. Their confidence and relatively high levels of education may stem from the fact that their own family background was sufficiently prosperous both to pay for girls’ education and to establish kin networks that facilitated their successful job searches.<sup>17</sup> However, it is not possible to establish the causal links implied by this argument. One problem is that it could equally be argued that women’s ability to choose to leave men is *not* primarily influenced by their level of education, since many poorly educated women also appear to have left men, even when their labor market prospects are rather bleak.

An alternative argument is that the ‘choices’ faced by both more and less educated women are strongly constrained by the level and pattern of demand for female workers in the local labor market. A relatively high proportion of the women interviewed in the MRLS in Manica province were divorced and separated, as shown in Table 1. Part of the explanation for this finding may be the fact that the level and rate of growth of investment in female wage labor intensive agribusiness ( e.g. tobacco) has been high in tobacco growing areas like Manica compared to other provinces (Benfica et al. 2005).<sup>18</sup> Thus, labor market demand within Manica may have allowed, or even encouraged, a high proportion of women to attempt to survive on their own.<sup>19</sup> Of course, individual women (and men) have little control over the patterns of demand for their labor, but changes in local or more distant labor market

opportunities may precipitate changes in marital status - including the effective desertion of women by male migrant labor.<sup>20</sup> The use of logistic regression techniques to “explain” either women’s marital status or their degree of success in labor markets does not help a great deal in untangling and ranking the most important of these and other plausible causal processes. At best, these regression results (further discussed in the Appendix) point to complexity and to the range of different factors influencing uncertain outcomes for women in the labor market and in their relationships with men.<sup>21</sup> Besides, the concept of ‘choice’, or constrained ‘choice’, however fashionable in mainstream economics, is clearly inappropriate when analyzing the behavior of desperately poor Mozambican women regularly coerced by violence and/or acute hunger (Amit Bhaduri 1986).

Some of the life histories of illiterate women collected during the fieldwork for the MRLS emphasize another important aspect of women’s inability to ‘choose’ their relationships with men. For example, the case of Amalia (discussed at greater length in Sender, Oya and Cramer 2006a) illustrates how little control some women have over whether or not they become divorced or separated. Amalia was married twice as a very young girl, but both of her husbands sent her back to live with her father, because she failed to produce any children. To escape persistent accusations of witchcraft, Amalia left her father’s home, migrated in search of rural wage employment within the province and eventually established a new relationship with a man.<sup>22</sup> Unfortunately, the child she bore with this man died at the age of three months and she was again abandoned. When she was interviewed, she had been living on her own in acute poverty for many years and was not planning to attempt another relationship.

Amalia's example, as well as some literature on divorce in OECD economies, suggests that women who fail to have children, as well as women who fail to have sons, are significantly less likely to become or remain married (Lundberg 2005).<sup>23</sup> Thus, the probability of being divorced and separated may be influenced by differences in the birth histories of the female principal respondents in the MRLS. In fact, a relatively high proportion of the divorced and separated principal respondents in the MRLS did *not* have a son who was alive at the time of the survey (23 percent), compared to non-divorced/separated women (17.8 percent)<sup>24</sup>. More importantly, divorced and separated women had a (statistically) significantly *lower* number of living children than non-divorced/separated women, as shown in Table 7.

[INSERT TABLE 7 HERE]

##### *5. Degrees of Poverty and the Education of Children in the MRLS*

Evidence from longitudinal survey data in OECD economies suggests that both divorce and widowhood result in “prolonged economic hardship for women and, if present, their children” (Karen Holden and Pamela Smock 1991:74; Pamela Smock, Wendy Manning and Sanjiv Gupta 1999). Similarly, while all female respondents in the MRLS live in households that are, on average, much poorer than other rural households in Mozambique (as noted above), widowed respondents live in households that are particularly deprived. However, there is marked differentiation in the degree of deprivation suffered by MRLS households, and not all divorced and separated women live in abject poverty. These differences between households, in terms of the severity of their poverty, have been analyzed by constructing a simple possessions score (determined by household access to basic material assets, i.e. a

toilet, shoes, beds, paraffin lamps, watches/clocks, and radio cassettes).<sup>25</sup> Possessions scores ranged between a minimum of -1 (reflecting no access at all to the simplest assets) and a maximum of 5. The mean score for the households of female respondents is 1.19 and the standard deviation is high.<sup>26</sup> The poorest group of households, the bottom third, was defined as those with a possessions score between -1 and 0, while the least poor households (27 percent of all households) were defined as those with a possession score of 3 or more.

Table 8 gives the possessions scores for the households of female MRLS respondents by marital status. The scores for widows are indeed very low, consistent with the very low levels of education achieved by widows, particularly older widows, shown in Table 5. However, the distribution of possessions scores in Table 8 suggests that divorce and separation do *not* necessarily condemn women to extreme poverty. In fact, the mean possessions score for divorced and separated women is marginally higher than the score for non-divorced/separated women (1.29 compared to 1.16), and 26 percent of divorced and separated women are in the least poor class of household, compared to 21 percent of non-divorced/separated women. Thus, despite gender discrimination in rural labor markets, some divorced and separated women can earn enough to escape the most degrading poverty and the worst living conditions. The specific characteristics of this small and successful group of divorced and separated women, the “pioneers of new social possibilities for women” (Naila Kabeer, 1997: 299) have been discussed in more detail in an earlier paper (Sender, Oya and Cramer, 2006b).

[INSERT TABLE 8 HERE]

Another dimension of household welfare, apart from access to material goods, is certainly not adversely affected by divorced/separated status. Divorced and separated women clearly achieve better results in educating their children than the results achieved by other women. Divorced and separated mothers are especially good at investing in their daughters' education compared to non-divorced/separated mothers. Thus, in absolute terms, the daughters of divorced and separated women have achieved more schooling (in terms of the mean and median number of years of schooling completed) than the daughters of non-divorced/separated women, as shown in Table 9. Moreover, the education gap between daughters and sons of divorced and separated mothers is *lower* than the corresponding gap between the daughters and sons of non-divorced/separated mothers, i.e. divorced and separated mothers favor their sons far less than non-divorced/separated mothers. Figure 2 shows that the size of the gender gap, measured by the ratio of the mean or median years of education achieved by sons compared to daughters, is much higher for non-divorced/separated than divorced and separated mothers.

[INSERT TABLE 9 AND FIGURE 2 HERE]

It is not surprising that the sons of the male principal respondents in the MRLS have had more years of education (a mean of 5.39 years) than other children in the MRLS, since their fathers are more educated and earn higher wages, on average, than female wageworkers. It is more surprising that the children of divorced and separated female principal respondents are, on average, better educated than the children of male principal respondents - because the daughters of divorced and separated women boost the average by being significantly better educated than the daughters of male principal respondents (Table 9). The median number of years of education completed by the daughters of divorced and separated women is 4 years, compared to 3 years for the

daughters of male principal respondents. Although the sons of divorced and separated women do complete more years of education than their daughters, 5.29 years compared to 3.93 years (equivalent to 35 percent more years), the sons of male principal respondents are even more privileged, receiving 70 percent more years of education than the daughters of the principal male respondents. Thus, the size of the gender gap between the education of sons and daughters is particularly large for the children of the male principal respondents, very much larger than the gender gap for the children of divorced and separated women (Figure 2).

This MRLS evidence - that in households where women have greater autonomy in making resource allocation decisions the welfare of daughters is less likely to be neglected than in other households - confirms patterns found in the international literature on gender gaps in education and in nutrition (Duncan Thomas 1994: 979; Esther Duflo 2003: 21-22; Joyce Chen 2005:29; Farzana Afridi 2005: 17-18; Naila Kabeer 2005; Marcos Rangel 2006: 643-650). However, the estimates of “autonomy” in this literature have not considered divorced and separated status as an unambiguous indicator of women’s ability to act independently. The intergenerational poverty reduction impact of female education is also widely recognized (Thomas Schultz 2002) and the MRLS does find that divorced and separated mothers are more highly educated even if the differences are not statistically very significant.

However, the positive impact of women’s ready access to decent wage employment opportunities, as the basis for investment in their daughters’ future, has received much less attention in the literature, but appears in this paper as a critical factor. The focus is usually on maternal education as predicting the level of child education, particularly



the education of girls, rather than on the types of wage employment open to women.<sup>27</sup>

In fact, wage employment for women “is generally associated with lower levels of education of girls, most often the oldest girl who substitutes for her mother in the domestic division of labor” (Kabeer, 2003:37). This paper has, in contrast, emphasized the fact that divorced and separated women are more likely to have “good” jobs *and* to educate their daughters, facts that cannot be explained solely by reference to their level of education.

It is impossible to reach a definitive conclusion about the main causal processes here, but fieldwork insights concerning the relative success of some divorced and separated women do suggest a line of argument that could be the basis of further research.

Some divorced and separated women have gained self-confidence through schooling as well as the emancipatory experience of a successful struggle to survive on their wage income without a male partner. As a result, they appreciate that their daughters would be unwise to rely on male support, especially if men continue to restrict women’s access to the labor market. Instead, they believe that their daughters’ welfare and, less altruistically, their ability to care for them in their old age, will be greater if their daughters remain at school for as long as possible.

#### *F. Conclusions*

The MRLS results suggest that the relationships between marital status, levels of education, forms of participation in wage labor markets, and the welfare of household members are complex, varying over time, from place to place, and even from household to household in rural Mozambique. The analysis concluded that regression

techniques are not particularly helpful in teasing out causation and the interactions between variables: for example, whether divorced and separated women should be regarded as having successfully emancipated themselves from patriarchal bonds or as “victims” of male desertion and discriminatory labor markets, despite the potentially positive effects of their divorced and separated status. Longitudinal data for a carefully sampled cohort of rural women might improve analyses of the complex processes and the causal links involved but, until cohort studies become available, there is still considerable scope for improving existing survey instruments and methods. For example, demographic and health surveys need to collect data that are far more detailed on the employment histories, wages, occupations and working conditions of adult women.<sup>28</sup> At the same time, labor market surveys, apart from filling the huge gaps in their coverage of “irregular”, seasonal and casual workers in Africa, i.e. the poorest female workers, need to recognize the importance of collecting information on the reproductive history of women, and the timing of changes in their marital status.<sup>29</sup> Without this historical and demographic data, women’s patterns of labor market participation and the prospects for reducing their poverty will continue to be poorly understood.

Of course, there is also ample scope for micro surveys and qualitative research focused on the life histories of rural women and their changing relationships with men and their children.<sup>30</sup> MRLS life histories highlighted lacunae in the data collected through the larger-scale quantitative survey, including the absence of reliable information on the sensitive issue of domestic violence. Another particularly important defect was the failure to collect data on the timing of periods of cohabitation, and the history of women’s changes in marital status, to complement the

detailed questions on the timing of changes in employment and occupational status. The only data collected in the quantitative survey were on household members' current marital status.

Nevertheless, the MRLS results might be a useful starting point for future research on employment and poverty dynamics. The conclusions that women are more likely to be divorced and separated if: (a) they are more educated; (b) they have fewer or no children; (c) they have a good job; and (d) they live in an area in which labor market demand is high/rising, were tested through a logistic regression.<sup>31</sup> The regression results, as well as the descriptive statistics discussed above, suggested that each of these factors did increase the probability that a woman was currently divorced and separated, but the regression did not accurately predict divorced/separated status. Obviously, the probability of being currently divorced and separated is influenced by a wide range and combination of factors apart from those identified above.<sup>32</sup>

The probability of obtaining a "good job" (in a better segment of the labor market) was also discussed using descriptive statistics and tested through a logistic regression. The results suggest that this probability increases significantly if a woman lives in Manica and if she is divorced, separated or widowed. Controlling for other factors, the number of years of education completed by a woman did not appear to affect strongly the probability that she would have a better job and did not affect the likelihood of finding a good agricultural job.

Divorced and separated women were relatively successful in educating their children and, in particular, in educating their daughters. It was suggested that in explaining

this success it might be useful to consider not only the well-known intergenerational links between the education of mothers and daughters, but also the role of decent wage employment opportunities in increasing women's ability to make more autonomous decisions on household expenditures.

The policy conclusion that there is an urgent need to devote substantially more resources to the education of rural girls in Sub-Saharan Africa is commonplace, although there is little evidence of commitment to such a policy by donors or the state in Mozambique, or elsewhere in Africa (Jean Claude Berthélemy 2006; Cynthia B. Lloyd and Paul C. Hewett 2003). There is even less evidence that donors have recognized the need for, or developed effective policies to promote, the massive investments in agri-business required to increase the demand for female wage labor in rural Africa. Most donors, NGOs and government agencies continue to believe that the poverty of rural women can be reduced significantly by efforts to promote and subsidize self-employment in micro-enterprises, rather than wage employment. However, an analysis focused on a sample of the poorest women in Mozambique, divorced, separated and widowed women working for wages in rural areas, has shown that lowering the barriers of paternalist coercion, within and outside the family, and increasing female access to decently remunerated wage employment could make a substantial difference to the welfare of these women and their children.

#### REFERENCES CITED

- Afridi, Farzana. 2005. "Intra-Household Bargaining, Birth Order and the Gender Gap in Schooling in India." Retrieved January 4 2007. University of Michigan, Ann Arbor ([http://www.sitemaker.umich.edu/fafridi/files/afridi\\_chap2.pdf](http://www.sitemaker.umich.edu/fafridi/files/afridi_chap2.pdf)).
- Agadjanian, Victor. 2005. "Fraught with ambivalence: Reproductive intentions and contraceptive choices in a sub-Saharan fertility transition." *Population Research and Policy Review*, 24: 617-674.

- Berthélemy, Jean Claude. 2006. "To What Extent are African Education Policies Pro-poor?", *Journal of African Economies*, 15 (3), September: 434-469.
- Billy, J.; McLaughlin, N.S.; Landsdale, S. D. 1986. "The Effect of Marital Status at First Birth on Marital Dissolution among Adolescent Mothers." *Demography* 23 (3): 329-349.
- Bhaduri, Amit. 1986. "Forced Commerce and Agrarian Growth." *World Development* 14 (2, February): 267-82.
- Chen, Joyce J. 2005. "Dads, Disease and Death: Decomposing Daughter Discrimination." In *Graduate Student and Postdoctoral Fellow Working Paper No. 8. Center for International Development*, May. Retrieved January 4 2007. Harvard University, Cambridge ([http://www.cid.harvard.edu/cidwp/pdf/grad\\_student/008.pdf](http://www.cid.harvard.edu/cidwp/pdf/grad_student/008.pdf)).
- De Walque, Damien. 2006. *Who Gets AIDS and How?* Policy Research Working Paper No. 3844. Washington, D.C.: The World Bank.
- DHS. 2005. Inquérito Demográfico e De Saúde, 2002/3, Instituto Nacional de Estatística, Maputo.
- Duflo, Esther. 2003. "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa." *World Bank Economic Review* 17 (1): 1-25.
- Erlebach, Richard. 2006. "The Importance of Wage Labour in the Struggle to Escape Poverty: Evidence from Rwanda." Ph.D. Diss., School of Oriental and African Studies, University of London.
- Gulati, Leela. 1998. "The Poor Widows of Kootam: A Study of Widows in a Squatter Settlement." in Martha Alter Chen (ed.) *Widows in India*, pp. 347 -360. New Delhi: Sage Publication.
- Guyer, Jane and Pauline Peters. 1987. "Conceptualizing the Household." *Development and Change (Special Issue)* 18(2):197-214.
- Dreze, Jean and P.V. Srinivasan. 1998. "Widowhood and Poverty in Rural India: Some Inferences from Household Survey Data." Pp. 325-46 in *Widows in India*, edited by Martha Alter Chen. New Delhi: Sage Publication.
- Knodel, John and Mary Beth Ofstedal. 20003. "Gender and Ageing in the Developing World: Where Are the Men?" *Population and Development Review* 29(4):677-98.
- Holden, Karen C. and Pamela J. Smock. 1991. "The Economic Costs of Marital Dissolution: Why Do Women Bear a Disproportionate Cost?" *American Review of Sociology* 17: 51-78.
- Hossein, Naomi and Naila Kabeer, "Achieving Universal Primary Education and Eliminating Gender Disparity", *Economic and Political Weekly*, September 4: 4093-4099.
- IAF, 2004. 'Inquérito Demográfico e De Saúde, 2002/3', Instituto Nacional de Estatística, Maputo.
- Kabeer, Naila. 1997. "Women, Wages and Intrahousehold Power Relations in Urban Bangladesh" *Development and Change*, 28: 261-302.
- Kabeer, Naila. 2003. "Gender inequality in educational outcomes: a household perspective" Paper Commissioned for the *EFA Global Monitoring Report 2003/4, The Leap to Equality*", UNESCO, Paris.
- Kabeer, Naila. 2005. "Gender Equality and Human Development: The Instrumental Rationale" Human Development Report Office Occasional Paper, UNDP, New York.

- Kalmijn, Mathijs, Paul. de Graaf, and Anne-Rigt Poortman. 2004. "Interactions Between Cultural and Economic Determinants of Divorce in The Netherlands" *Journal of Marriage and Family*, 66 (February): 75–89.
- Lloyd, Cynthia B. and Paul C. Hewett, 2003. "Primary Schooling in sub-saharan Africa: Recent Trends and Current Challenges" Policy Research Division Working Paper, No. 176, Population Council, New York.
- Locoh, Therese, and Thiriatic, Marie-Paule. 1995. "Divorce et Remariage des Femmes en Afrique de l'Ouest. Le Cas du Togo." *Population* 50 (1): 61-93.
- Lubkemann, Stephen C. 2000. "The Transformation of Transnationality Among Mozambican Migrants in South Africa" *Canadian Journal of African Studies* 34 (1): 41-63.
- Lundberg, Shelley. 2005. "Sons, Daughters, and Parental Behaviour." *Oxford Review of Economic Policy* 21 (3): 340-56.
- Macmillan, Ross and Rosemary Gartner. 1999. "When She Brings Home the Bacon: Labor-Force Participation and the Risk of Spousal Violence Against Women", *Journal of Marriage and the Family*, 61, 4: 947-958.
- Mather, David, Cynthia Donovan, Michael Weber, Higinio Marrule, and Albertina Alage. 2004. "Household Responses to Prime Age Adult Mortality in Rural Mozambique: Implications for HIV/AIDS Mitigation Efforts and Rural Economic Development Policies." St. Catherine's College, Oxford: Center for the Study of African Economies.
- Murray, Last. 1992. "The Importance of Extremes: The Social Implications of Intra-Household Variation in Child Mortality." *Social Science and Medicine* 35(6): 799-810.
- Newman, Constance. 2002. "Gender, Time Use, and Change: The Impact of the Cut Flower Industry in Ecuador." *The World Bank Economic Review* 16 (3): 375-96.
- Bhat, P. N. Mari. 1998. "Widowhood and Mortality in India." in Martha Alter Chen (ed.) *Widows in India*, pp. 173-88 . New Delhi: Sage Publication.
- Peters, Pauline E. 2002. "Bewitching the Land: The Role of Land Disputes in Converting Kin to Strangers and in Class Formation in Malawi." *Journal of Southern African Studies* 28 (1, March): 155-78.
- . 2006. "Rural Income and Poverty in a Time of Radical Change in Malawi." *Journal of Development Studies* 42 (2, February): 322-45.
- Rangel, Marcos A. 2006. "Alimony Rights and the Intrahousehold Allocation of Resources: Evidence from Brazil." *The Economic Journal* 116 (July): 627-58.
- Reniers, Georges. 2003. "Divorce and Remarriage in Rural Malawi" *Demographic Research*, Special collection 1, article 6: 175-206.
- Rukmini D. V., 1998. "Women's Employment Status by Marital Status in Harayana." Pp. 373-87 in *Widows in India*, edited by Martha Alter Chen. New Delhi: Sage Publication.
- Schultz, Thomas P. 2002. "Why Governments Should Invest More to Educate Girls," *World Development*, 30 (2): 207-225.
- Sender, John. 2002. "Women's Struggle to Escape Poverty in Rural South Africa." *Journal of Agrarian Change* 2 (1): 1-49.
- . 2003. "Rural Poverty and Gender: Analytical Frameworks and Policy Proposals." in Ha-Joon Chang (ed.) *Rethinking Development Economics*, pp. 401-20 . London: Anthem Press.
- Sender, John, Christopher Cramer and Carlos Oya. 2005. *Social Protection Discussion Paper Series, No. 0525. World Bank*, June. Retrieved January 1

2007. Washington, DC: Social Protection Unit, Human Development Network (<http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/0525.pdf>).
- Sender, John, Carlos Oya and Christopher Cramer. 2006a. "Women Working for Wages: Putting Flesh on the Bones of a Rural Labor Market Survey in Mozambique." *Journal of Southern African Studies* 32 (2, June): 313-34.
- . 2006b. "Lifting the Blinkers: A New View of Power and Poverty in Mozambican Labor Markets" (Eprint Department of Development Studies). *School of Oriental and African Studies*, May. London: Development Studies Department, Eprints Repository ([http://eprints.soas.ac.uk/archive/00000130/01/Lifting\\_the\\_Blinkers\\_for\\_working\\_paper.pdf](http://eprints.soas.ac.uk/archive/00000130/01/Lifting_the_Blinkers_for_working_paper.pdf)).
- Sender, John and Sheila Smith. 1990. *Poverty, Class, and Gender in Rural Africa: A Tanzanian Case Study*. London and New York: Routledge.
- Sheldon, Kathleen E. 2002. *Pounders of Grain: A History of Women, Work, and Politics in Mozambique*, Portsmouth, NH, Heinemann.
- Silberschmidt, Margrethe. 1999. *Women Forget that Men are the Masters*, Nordiska Afrikainstitutet, Stockholm.
- Smock, Pamela J., Wendy D. Manning, and Sanjiv Gupta. 1999. "The Effect of Marriage and Divorce on Women's Well-Being." *American Sociological Review* 64 (6, December): 794-812.
- Stifel, David, David Sahn, and Stephen Younger. 1999. *Cornell Food and Nutrition Policy Program Working Paper*. Retrieved January 9 2007. Cornell University (<http://people.cornell.edu/pages/des16/sahn/wp94.pdf>).
- Tilson, Dana, and Larsen, Ulla. 2000. "Divorce in Ethiopia: the Impact of Early Marriage and Childlessness." *Journal of Biosocial Science* 32: 355-372.
- Takyi Baffour K. and Christopher L. Broughton. 2006. "Marital Stability in Sub-Saharan Africa: Do Women's Autonomy and Socioeconomic Situation Matter?" *Journal of Family and Economic Issues* 27 (1): 113-32.
- Thomas, Duncan. 1994. "Like Father, Like Son; Like Mother, Like Daughter." *Journal of Human Resources* 29 (4, Autumn): 950-88.
- Todd, Selina. 2005. *Young Women, Work, and Family in England 1918-1950*. Oxford: Oxford University Press.
- Vijfhuizen, Carin, Carla Braga. 2003. *Gender, Markets and Livelihoods in the Context of Globalisation: A Study of the Cashew Sector in Mozambique*. Main Report: Phase 1: Nampula Province. London: International Institute for Environment and Development/Eduardo Mondlane University. 28 pages.

## APPENDIX

### **Logistic regressions of female divorced/separated status**

This appendix presents the results of logistic regressions designed to capture the correlations between the variables discussed in this paper after controlling for some significant factors. The models do not aim to establish a line of causality but the results confirm some of the findings presented in the contingency tables above.

Table A1 shows results of the two best regressions of the status of divorce/separation on some individual and household characteristics of female wageworkers. These results highlight the statistical importance of the type of labor market participation as a covariate of divorce/separation. Both variables, access to ‘good’ or ‘bad’ jobs are statistically very significant and have a strong effect on the likelihood of being divorced after controlling for education and variables indicating the number of born children and the presence of a son, which are proxies for childlessness that attempt to capture the pro-natalist discrimination faced by women. The regression also controls for specific effects associated with the province with highest divorce rates in the MRLS sample. The strong statistical significance of the type of job (good and bad jobs) highlights the importance of labor market indicators in accounting for the likelihood of divorce/separation. Pro-natalism, rather than the presence of a living son in the household is also significant and indicates that women who have given birth to a larger number of children are *less* likely to be divorced and separated. Every additional child reduces the probability of divorce/separation by almost 12 percent.

The inclusion of a specific geographical variable (province of Manica) does not add more explanatory power to the model, suggesting that the other factors have a more



significant independent effect. Although there were more ‘good’ jobs available in the Manica sample, the association between access to these jobs and divorce status was also strong in the other two provinces. Moreover, the type of job is a powerful predictor, especially in combination with a proxy for ‘childlessness’. Using this model, the predicted probability of being divorced/separated of a woman with primary education completed, only two children born and no son, and a ‘good’ job is as high as 53 percent.

[INSERT TABLE A1 HERE]

The figure A1 shows the distribution of predicted probabilities of divorce by number of children still alive. As the number increases, the probability of divorce/separation decreases. This figure also shows the independent effect of both education and, most importantly, type of labor market participation. The line is shifted upwards to much higher probabilities of divorce when women have a ‘good’ job and have completed primary education. The graph shows that the effect of securing a more regular and monthly paid job is much stronger than the effect of having completed primary school.

[INSERT FIGURE A1 HERE]

### **Logistic regressions of access to ‘good’ jobs**

The results in Table A2 confirm that marital status has an independent significant effect on the odds of being in a ‘good’ job, both in general and in the agricultural sector. Both divorced/separated women and widows are twice as likely as other women to secure a ‘good’ job, after controlling for education and age. This is important because it means that, despite what contingency tables show, i.e. that a low proportion of widows had access to a ‘good’ job and a high proportion made do with very casual poorly remunerated work, many of the most disadvantaged widows were

rather old. This regression shows that a divorced woman and a widow have more or less the same chance of securing a ‘good’ job if they are of the same age and education, so that there is nothing intrinsic to widowhood that reduces the odds of getting a better job compared to divorced and separated women. However, the MSLS results also showed that divorced and separated women were relatively more educated and significantly younger than widows. The regression also signals the weak independent effect of education, especially for good jobs in agriculture. The first regression shows that an extra year of schooling, other things being equal, increases the probability of having a ‘good’ job by 27 percent, well below the effect of other variables like marital status and province. Work experience with the same employer does not help much, especially for ‘good’ agricultural jobs, which, for female workers tended to be only seasonal, and very rarely led to a permanent employment contract. In fact, age has a weak negative effect in the first regression, which suggests that relatively younger women are preferred in ‘good’ jobs (all categories), while slightly older women are more likely to get ‘good’ agricultural jobs.

In these regressions, the geographical variables have a very significant effect, in different directions. Manica province accounts for a large proportion of ‘good’ jobs, especially in agriculture, as shown by the very high odds (4 times more likely to be in a ‘good’ job if the woman lives in Manica and much less likely if she lives in Nampula where these jobs are scarce). This result is a sign of the importance of context and the segmentation of provincial and local labor markets. The combination of both female workers’ characteristics and specific geographical effects seems to explain much of the chance of getting ‘good’ jobs for female workers in the MRLS sample, as the relatively high Chi-square and the pseudo- $R^2$  shows.

[INSERT TABLE A2 HERE]

## TABLES

**Table 1: Marital Status of Female Principal Respondents Aged 15-49 Years in the MRLS**

		<i>Province</i>			<i>Total</i>
		NAMPULA	ZAMBEZIA	MANICA	
Not divorced/widowed/separated	<i>Count</i>	257	220	217	694
	<i>% within Province</i>	69.9%	65.6%	53.9%	62.8%
Divorced/widowed/separated	<i>Count</i>	111	115	186	412
	<i>% within Province</i>	<b>30.2%</b>	<b>34.0%</b>	<b>46.0%</b>	<b>37.3%</b>
Divorced / separated	<i>Count</i>	82	66	114	262
	<i>% within Province</i>	<b>22.3%</b>	<b>19.7%</b>	<b>28.3%</b>	<b>23.7</b>
Total	<i>Count</i>	368	335	403	1106

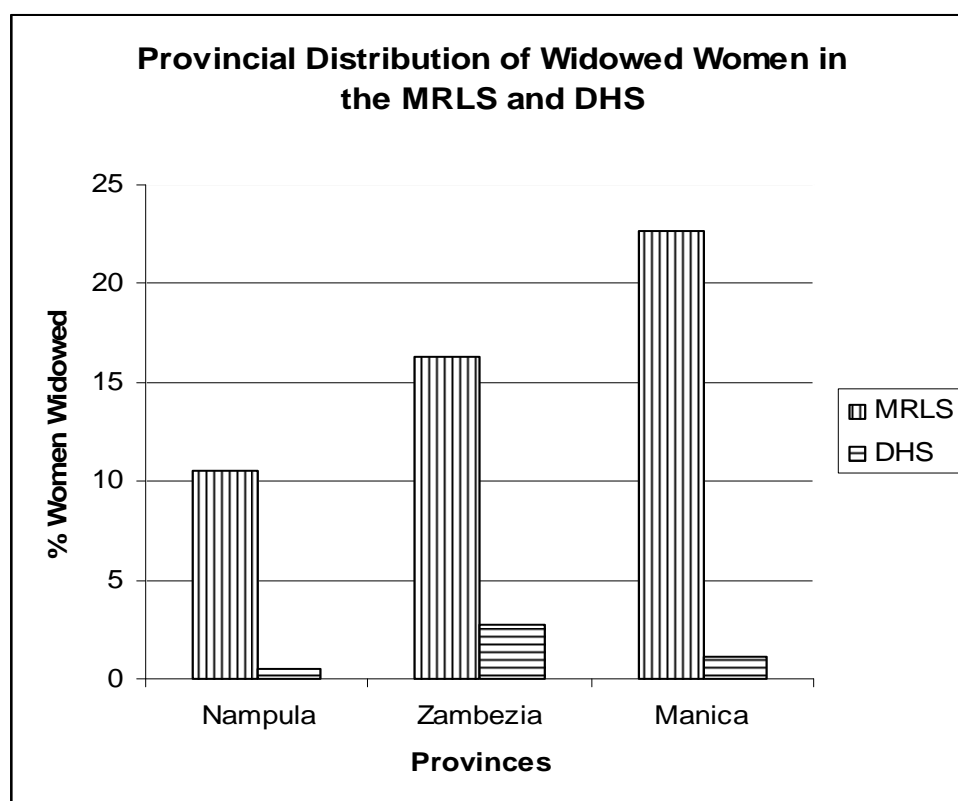
**Table 2: Marital Status of Females Aged 15-49 Years in the DHS**

	<i>Urban %</i>	<i>Rural %</i>	<i>National %</i>	NAMPULA %	ZAMBEZIA %	MANICA %
<i><b>Not</b> divorced /separated / widowed</i>	82.3	88.4	86.1	88.1	87.5	89.6
<i>Divorced/widowed/separated</i>	17.7	11.6	<b>13.9</b>	11.9	12.5	<b>10.4</b>
<i>Widowed</i>	1.1	0.8	0.9	0.5	2.7	1.1
<i>Divorced/separated</i>	16.6	10.8	13.0	11.4	9.8	9.3

**Table 3: Incidence of Divorce and Widowhood by Age in MRLS and DHS**

Age Group	Divorced/Separated (%)		Widowed (%)	
	MRLS	DHS	MRLS	DHS
15-19	12.8	5.1	2.7	0
20-24	26.2	13.3	5.9	0
25-29	30.5	13.2	9.3	0.5
30-39	24.1	14.6	17.2	0.9
40-49	20.4	19.0	29.8	3.5
50-59	15.6	n.a	48.9	n.a
60+	8.9	n.a	68.9	n.a

**Figure: 1**



**Table 4. Provincial Urban and Rural HIV Prevalence Rates and Rural Mortality Rates for Adults 15-49 Years**

<b>Province</b>	<i>Adult death due to Illness in Rural Areas (1992-2002)</i>	<i>Rural and Urban Adult HIV Prevalence Rates 2002</i>
	<b>% of adults within province</b>	
<b>Niassa</b>	5.4	11.1
<b>Cabo Delgado</b>	5.9	7.5
<b>Nampula</b>	3.3	8.1
<b>Zambezia</b>	5.0	12.5
<b>Tete</b>	5.3	14.2
<b>Manica</b>	7.5	19.0
<b>Sofala</b>	4.9	26.5
<b>Inhambane</b>	3.5	8.6
<b>Gaza</b>	7.6	16.4
<b>Maputo</b>	5.8	17.4
<b>National</b>	5.2	13.6

Source: Mather et al. (2004: page) from TIA 2002 Rural Survey and Health Ministry

**Table 5: Education of Female Respondents by Marital Status in the MRLS\***

		<b>DS</b>	<b>NDS</b>	<b>W</b>
<i>% within status</i>	<i>Never at School:</i>	34 (32)	42 (39)	63 (40)
	<i>Completed Primary School:</i>	16 (15)	11 (11)	8 (12)
<i>Average years of schooling</i>	<i>Mean:</i>	3.1 (3.0)	2.44 (2.5)	1.66 (3.0)
	<i>S.E. of mean</i>	0.17 (0.24)	0.09 (0.13)	0.18 (0.35)
	<i>Median:</i>	3.0 (3.0)	2.0 (2.0)	0 (3.0)
	<i>N</i>	274 (145)	949 (399)	204 (76)

DS=divorced or separated; NDS=non divorced/separated; W=widowed

\*Bracketed figures refer to female respondents in the age group 25 to 39 years. Older women in the MRLS had less opportunity to attend school, since there were fewer rural primary schools in Mozambique when they were girls. Primary school construction in rural areas only expanded rapidly in the early 1990s (Handa, 2002: 110)

**Table 6: Quality of Job and Marital Status of Female Respondents in the MRLS**

	Marital status of female worker			Phi coefficient	Phi coefficient
	<i>NDS</i>	<i>DS</i>	<i>W</i>	<i>DS - job</i>	<i>W - job</i>
<b>good job (all sectors)</b>	19	32	21	0.129***	-0.014 <sup>n.s.</sup>
<b>good job in agriculture</b>	8	15	15	0.088***	0.075***
<b>bad job in agriculture</b>	36	23	35	-0.116***	0.015 <sup>n.s.</sup>

(a) Data as % within marital status

(b) DS=divorced or separated; NDS=non divorced/separated; W=widow

(c) “Good job” definition = paid monthly and more regular employment

“Bad job” definition = casual agricultural for few days per month

(d) Phi is a non-parametric coefficient of association between two dichotomous variables; \*\*\* denotes significant association at 1%, \*\* at 5% and \* at 10%, n.s. = not statistically significant

**Table 7: Numbers of Living Children for DS and NDS Principal Respondents in the MRLS\***

Number of Living Children				
<i>Marital Status</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Error of Mean</i>	<i>N</i>
NDS women	2.99	3.00	(0.07)	793
	(3.27)	(3.00)	(0.08)	(399)
DS women	2.39	2.00	(0.10)	275
	(2.56)	(3.00)	(0.13)	(146)
	2.84	3.00	(0.06)	1068
Total	(3.08)	(3.00)	(0.08)	(545)

\* Bracketed figures refer to female respondents in the age group 25 to 39 years. The exclusion of younger and older women does not alter the conclusion that DS women are likely to have had fewer children.

**Table 8: Possessions Scores for Divorced, Separated and Widowed Female Respondents in the MRLS**

<i>Female Respondents</i>				
	<i>NDS</i>	<i>DS</i>	<i>W</i>	<i>All</i>
<b>Possessions Score mean</b>	1.16	1.29	0.88	1.19
<b>Possessions Score median</b>	1.00	1.00	1.00	1.00
<b>% in poorest class</b>	40	41	47	41
<b>% in least poor class</b>	21	26	17	22
<b>N</b>	952	275	202	1227

DS=divorced or separated; NDS=non divorced/separated; W=widow

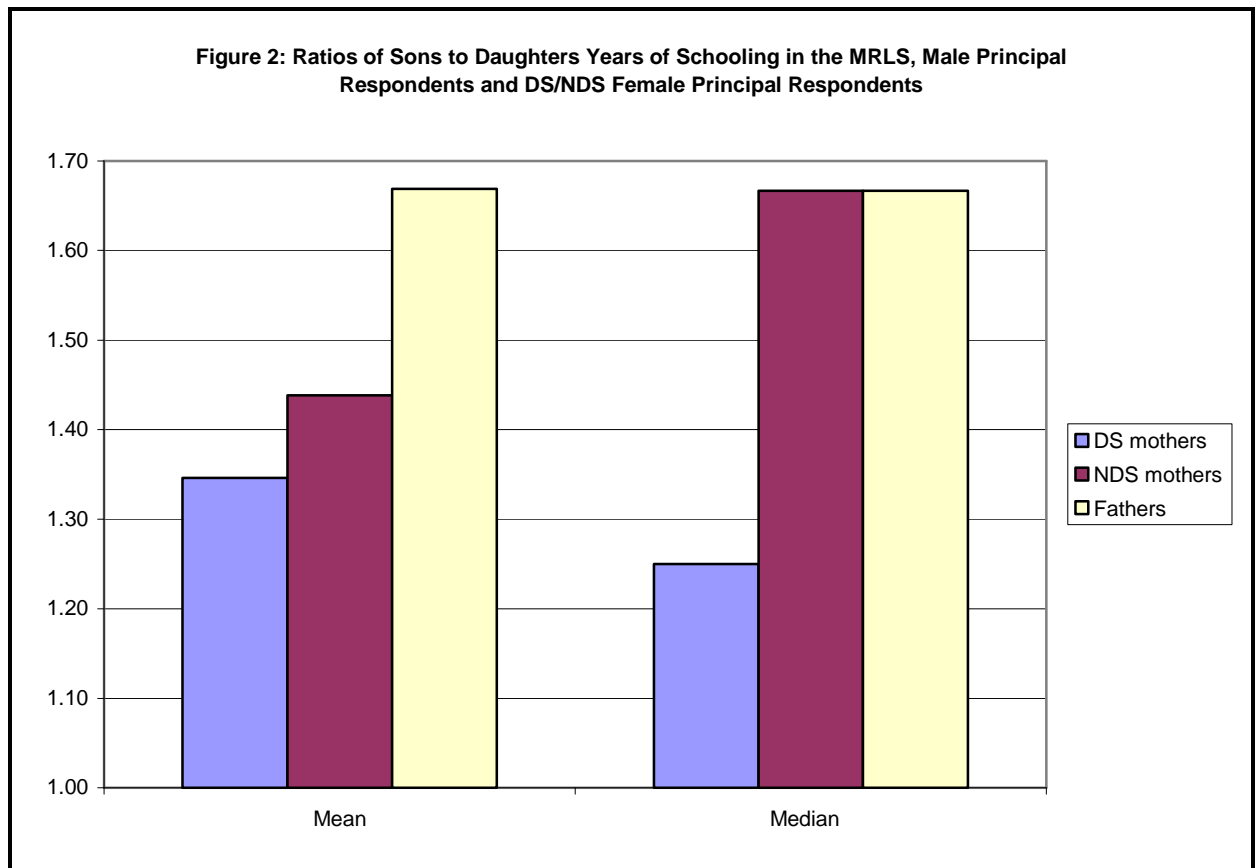
**Table 9: - Education of Sons and Daughters of Female and Male Principal Respondents in the MRLS**

		<b>FEMALE Principal Respondents</b>		<b>MALE Principal Respondents</b>	
	<i>Variable</i>	<i>Stat</i>	<b>DS Marital Status</b>	<b>NDS Marital Status</b>	
<b>Children 16 yrs +</b>	<i>Years of schooling</i>	<i>Mean</i>	4.62	4.25	4.36
		<i>Median</i>	5.00	4.00	4.00
<b><sup>a</sup>Sons 16 yrs +</b>	<i>Years of schooling</i>	<i>Mean</i>	5.29	4.89	5.39
		<i>Median</i>	5.00	5.00	5.00
<b><sup>b</sup>Daughters 16 yrs +</b>	<i>Years of schooling</i>	<i>Mean</i>	3.93	3.40	3.23
		<i>Median</i>	4.00	3.00	3.00

DS= divorced or separated; NDS= non divorced/separated.

<sup>a</sup> For Female principal respondents N = 414; for Male principal respondents N = 209

<sup>b</sup> For Female principal respondents N = 334; for Male principal respondents N = 189

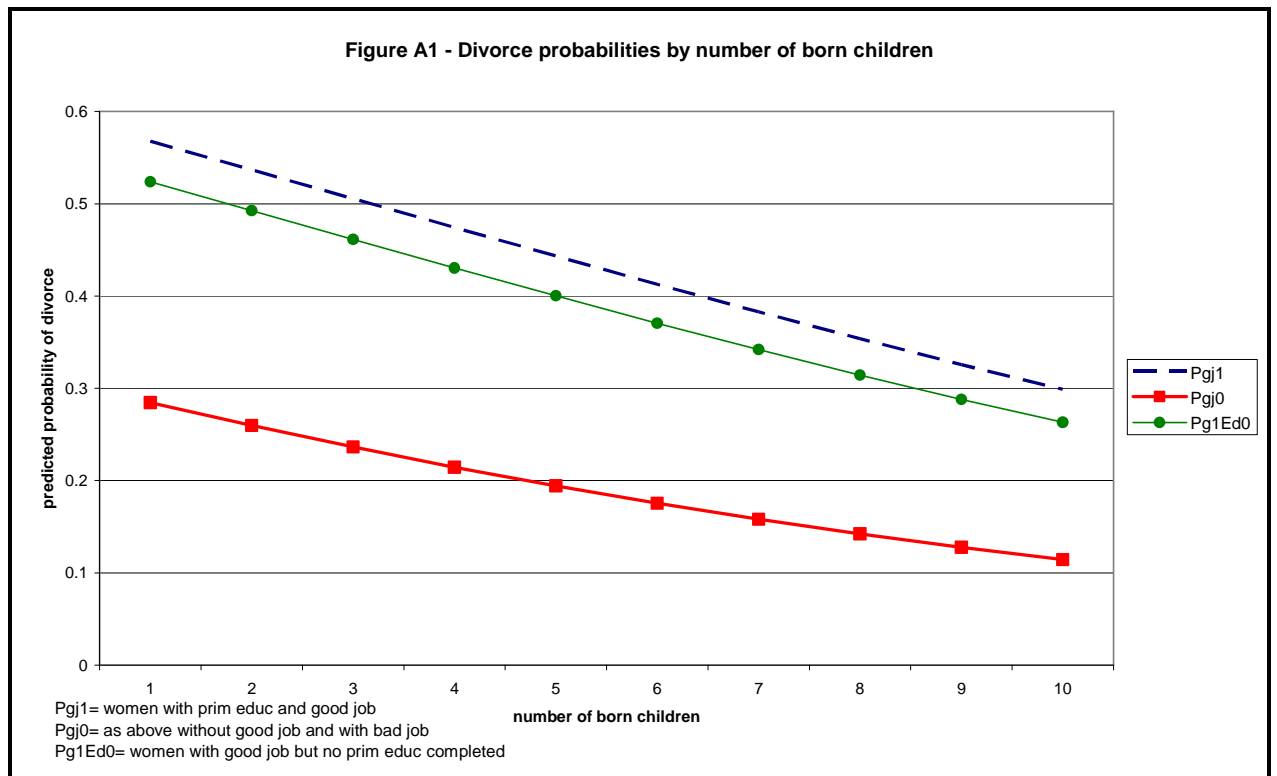


**Table A1. Odds ratios for logistic regressions of divorce/separation**

	<i>Model 1</i>	% probability change per unit of change in X	<i>Model 2</i>	% probability change per unit of change in X
1. intercept	0.611**	-38.9	0.621**	-37.9
2. primary education completed	1.182	18.2	1.194	19.4
3. presence of son	0.894	-10.6	0.898	-10.2
4. good job	1.908***	90.8	1.971***	97.1
5. bad job	0.597***	-40.3	0.596***	-40.4
6. number of born children	0.881***	-11.9	0.882***	-11.8
7. Manica province	1.094	9.4		
N (missing values)	917 (316)		917 (316)	
-2 Log likelihood	967.719		967.9867	
Likelihood Ratio Chi Square	60.8		60.6	
Df	6		5	
Pseudo R <sup>2</sup>	0.10		0.09	

Notes: Levels of significance = \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.





**Table A2. Odds ratios for logistic regressions of access to “good” jobs**

	<i>all rural jobs</i>	% probability change per unit of change in X	<i>agricultural jobs</i>	% probability change per unit of change in X
1. intercept	0.411	-58.9	0.004***	-99.6
2. Manica province	4.007***	300.7	8.781***	778.1
3. Nampula province	0.627*	-37.3	0.077**	-92.3
4. divorced/separated	2.016***	101.6	1.802**	80.2
5. widow	1.989***	98.9	2.406***	140.6
6. schooling years	1.271***	27.1	1.045	4.5
7. work experience (seniority)	1.009**	0.9	1.009	0.9
8. age	0.916**	-8.4	1.138**	13.8
9. age <sup>2</sup>	1.001	0.1	0.998**	-0.2
<hr/>				
N (missing values)	1211 (21)		1211 (21)	
-2 Log likelihood	982.166		577.713	
Likelihood Ratio Chi Square	290.4		191.5	
Df	8		8	
Pseudo R <sup>2</sup>	0.33		0.311	

Notes: Levels of significance = \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

## **Endnotes**

---

<sup>1</sup> Moreover, the published DHS data refer to the *total* population in each province. The only DHS data disaggregated into rural and urban areas are at the national level; these indicate that the rates of divorce/separation and widowhood in urban areas are 1.7 times higher than in rural areas. If we apply the DHS's national rural:urban ratio for divorce/separation and widowhood rates to the tabulated provincial data, we can estimate that the rate for *rural* Manica in the DHS would be between 8 and 9 percent, compared to a rate of almost 50 percent in the MRLS.

<sup>2</sup> The widely held view that widowed women in developing countries are "particularly prone to poverty" is discussed in John Knodel and Mary Beth Ofstedal (2003). Households containing divorced, separated and widowed women are not always clearly identified in African poverty surveys, which often classify households in terms of misleading categories such as "female headed", or "de-facto female headed". For a critical discussion of attempts to link female-headed households to poverty see Jane Guyer and Pauline Peters (1987) and Jean Drèze and P.V. Srinivasan (1998).

<sup>3</sup> Unless otherwise stated, the analysis of women (and men) in this paper is based on data concerning these "principal" respondents. The use of the term "principal" does not have any connotations of "headship"; the MRLS did not attempt to identify a household "head". Households are defined in terms of economic relationships between members, rather than the narrower residential or sociological relationships commonly used in socio-economic surveys (Sender, Oya and Cramer 2006a).

<sup>4</sup> The life histories of Mozambican women are discussed in Sender, Oya and Cramer (2006a). The strength and historical significance of male resistance to the proletarianization of their wives elsewhere in rural Africa is discussed in John Sender and Sheila Smith 1990; and in Sender 2002. In a context of rapidly expanding female wage earning opportunities in Bangladesh, "any diminution of women's economic dependency was perceived as a threat" by their husbands (Naila Kabeer 1997: 271). Life histories of women in Kerala confirm that the death of a husband usually precipitates a change in employment status and, more generally, widows in Kerala and Haryana are much more likely than other poor women to participate in the labor market (Leela Gulati 1998: 355-6; D.V. Rukmini 1998: 384). In the US, longitudinal studies show a dramatic increase in labor market participation following separation and divorce (Holden and Smock, 1991: 59). However, these labor market outcomes are determined by different processes and factors that are not strictly comparable across countries and time.

<sup>5</sup> Unfortunately, the focus on labor market issues meant that the MRLS only obtained information on respondents' *current* marital status, failing to collect information on whether or not women had ever been married, the number of times they had been married, or the duration of previous marriages.

<sup>6</sup> This lack of choice has been well documented in other contexts. For example, between 1920 and 1940 there were large and significant differences between the labor force participation rates of young females across different regions of England, reflecting marked local differences in levels of demand in geographically distinct labor markets (Selina Todd 2005:57)

<sup>7</sup> Many of these divorced/separated teenagers have children. A total of 90 female respondents in the MRLS had become pregnant as teenagers, giving birth to at least one child. These respondents and their children have been shown to suffer from particularly acute forms of deprivation relative to other women in the MRLS (Sender, Oya and Cramer 2006a: 325-6)

<sup>8</sup> The DHS Women's Questionnaires are only completed for women aged between 15 and 49 years. The general Household Questionnaire in the DHS does not collect information on the marital status of other household members.

<sup>9</sup> HIV prevalence in Manica may be high because relatively good transport infrastructure in that province facilitated transmission. Manica's transport links, as well as its favourable agro-ecological conditions, have also underpinned the agricultural investments that increased the demand for female wage labor that province, as discussed below. Moreover, Manica has experienced a large influx of new and returning refugees from neighbouring countries (especially Zimbabwe and Zambia) characterised by high HIV/AIDS prevalence rates, which may have resulted in a more rapid spread of HIV (David Mather, Cynthia Donovan, Michael Weber, Higinio Marrule, and Albertina Alage 2004). Unfortunately, the data on the provincial distribution of war-related deaths are so patchy that they cannot help in explaining the provincial distribution of widows found in different surveys.

<sup>10</sup> At national level the observed differences in divorce rates by education attainment are, in any case, not substantial. Some studies elsewhere in Africa have shown a weak positive relationship between education and divorce, while others suggest a non-linear relationship with "the lowest divorce rates observed among uneducated women and among the highest educational groups" (Georges Reniers 2006: 182).

<sup>11</sup> Thus, over half of the widowed principal respondents aged between 30 and 39 years never attended school, and the median number of years of education completed by widows in this older age group is

---

zero. In contrast, the median number of years of completed education for divorced and separated women in the same age group is 2 years, and only 38 percent of these divorced and separated women failed to attend school.

<sup>12</sup> “Good” jobs were generally monthly paid and regular offering median wage rates between one third and 50 percent higher than the rates for “bad” jobs, which were characterized by their irregularity and a high incidence of piecemeal payments. Moreover, working conditions were far superior in “good” jobs, in terms of provision of meals, accommodation, loans, and compensation for overtime. “Good” jobs were dominated by male workers (65 percent) in the MRLS sample; two thirds of workers with worse jobs were women.

<sup>13</sup> Non-parametric measures of association between divorce/separation status and likelihood of access to good or bad jobs (also reported in Table 6) are statistically significant.

<sup>14</sup> Employers in rural Mozambique exercise a great deal of discretion in determining the wages and working conditions offered to their male and female employees. The scope of this discretion, which plays an important role in the distribution of “good” and “bad” jobs irrespective of the attributes of individual workers, is discussed in Sender, Oya and Cramer (2006b).

<sup>15</sup> The logistic regression results suggest that a woman with a ‘good’ job was 3.3 times more likely to be divorced/separated than a woman with a ‘bad’ job, after controlling for education and other demographic variables (see Appendix).

<sup>16</sup> About one third of these female household members were the spouses of male principal respondents; most of the remainder were the parents/parents-in-law (20 percent), or the siblings (17.5 percent), or the children (17.5 percent) of principal respondents.

<sup>17</sup> The MRLS established that relatives and “friends”, as well as bribery, played an important role in securing permanent employment.

<sup>18</sup> According to information released by the *Associação Comercial e Empresarial de Manica* (ACIAM), recorded employment in Manica’s commercial agriculture increased fivefold between 2001 and 2003 reaching a peak of 4385 workers. Many members of ACIAM are new investors who were previously based in Zimbabwe (<http://www.open.ac.uk/technology/mozambique/pics/d62599.ppt>).

<sup>19</sup> Higher levels of demand for female agricultural workers in one region of Ecuador have been shown to lead to a significant increase in the bargaining power of women relative to men (Newman, 2002).

<sup>20</sup> The labor demand and other factors affecting changes in male migrants’ relationships with their spouses in rural Mozambique are discussed in Stephen C. Lubkemann (2000).

<sup>21</sup> Other empirical research on divorce in various African contexts confirms the complexity of the empirical determinants of divorce and remarriage, but these studies pay little attention to the role of female labor market participation (Therese Locoh and Maire Paule Thiriat 1995; Reniers 2003; Baffour K. Takyi and Christopher L. Broughton 2006).

<sup>22</sup> Similarly, Locoh and Thiriat (1995) and J. Billy, N.S. McLaughlin, and S.D. Landsdale (1986) show how women in West Africa have little control over their marriages at a young age. They begin to achieve some autonomy after the “rite de passage” of their first divorce. Their first husband often insists on divorce if women remain childless or their children have died. In southern Malawi, men may be blamed for child deaths or childlessness and the woman (or more often her family/elders) will then press for divorce (Pauline Peters, personal communication 2007).

<sup>23</sup> See also Locoh and Thiriat (1995) and Tilson and Larsen (2000) for examples in Africa and Kabere (1997: 289) for examples in Bangladesh. In Mozambique, there is some evidence that men hold more pro-natalist views than women but, as elsewhere in Africa, there is no evidence of strong preferences for sons by either men or women (Agadjanian 2005).

<sup>24</sup> The difference between the number of living sons of divorced and separated female principal respondents and the number of living sons for other female principal respondents is only weakly significant (at the 10 percent level).

<sup>25</sup> Asset indices are a useful and more robust guide to poverty analysis than poverty lines based on dubious expenditure *per capita* data. Possessions scores in the MRLS have been used to identify households that do not contain a literate adult, households failing to send their children to school and households containing illiterate young women (Sender, Oya and Cramer 2006a).

<sup>26</sup> The mean possessions score of the households of male respondents in the MRLS is, unsurprisingly, significantly higher (1.69) with a lower standard deviation.

<sup>27</sup> There are exceptions to this characterization of the literature. For example, in South Asia, “Research since the 1970s has documented the increasing fragility of the marriage bond, particularly among the very poor. Women appear(ed) to be losing faith in marriage as a means of security; for many, the education of daughters was seen as a source of security which their own lack of education had denied them. Subsequent changes in the (wage employment) opportunities available to women appear to have

---

reinforced their willingness to educate daughters” (Naomi Hossein and Naila Kabeer 2004: 4095). Thus, almost all of the female wage workers interviewed in a Bangladesh survey asserted “that they did not want their daughters to have to face the same limited opportunities that they have had to face in their own lives, particularly since marriage as a form of security appears to be less and less feasible. Education is increasingly seen as the best way ... to give their daughters a better chance in life (Kabeer 1997: 288).

<sup>28</sup> The latest DHS instruments in Africa have, belatedly, included measures of HIV status but these surveys contain far too little information on the labor market participation of female (and male) household members (Damien de Walque 2006).

<sup>29</sup> Generally, marriage histories have been at least until recently weakly covered in most surveys, including DHS, and censuses (Reniers 2003: 176).

<sup>30</sup> For an example of a particularly illuminating survey that is sensitive to conflictual and changing relationships between household members and to demographic histories see Pauline Peters (2002 and 2006).

<sup>31</sup> These factors are consistent with the findings of Takyi and Broughton (2006) on the determinants of divorce among Ghanaian women. Their findings suggest that different aspects of women’s ‘autonomy’ combine to increase the likelihood of divorce: work and education are important variables, together with some institutional measures of autonomy such as matrilineal kinship ties.

<sup>32</sup> As Reniers (2003) findings show, both in the case of rural Malawi and in his literature review of the issue in Africa, several factors interact to play a combined role in explaining divorce likelihood, namely individual characteristics like social class, religion, location, education, and ‘couple’ features like residence patterns (including absence or not of one of the spouses), age at first marriage and age difference between spouses, evidence of ethnic endogamy, polygyny and childlessness among others. A study in the Netherlands concludes that “the likelihood of divorce is higher when women are gainfully employed, when women have accumulated more paid work experience, and when wives are better educated”; but also notes that there are important interaction effects between labor force participation variables and cultural variables that also influence divorce probability (Matthijs Kalmijn, Paul. de Graaf, and Anne-Rigt Poortman 2004).