

Gendering livelihoods in protracted conflicts

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Abstract

Protracted conflicts give rise to particularly stark gender biases in livelihood of at risk populations. This paper examines how at risk populations maneuver their livelihood assets which are constrained by protracted conflict, to generate livelihoods outcomes. Probing—along the lines suggested by feminist scholars—revealed that there are interesting differences across the ways female and male headships pool resources to cope with protracted conflict. The fieldwork (January-April 2008) conducted in the Anuradhapura district in Sri Lanka involved a sample of 82 households.

We find that limited livelihood strategies and insufficient assets to female household heads had impoverished and pauperized them more than their male counterparts. This is supported by rigorous quantitative work as well as meticulous qualitative work. The asset quality of male headships was consistently better than for females. For instance, while 53 percent of male heads of households had passed grade ten only 20 percent of female heads had achieved the same feat. The salience of such asset imbalances in favor of male headships was reflected in the household incomes. Interestingly the lucky few among the female headships who escaped poverty relied on conflict related government assistance such as pensions for war widows.

Keywords: Civil war; Sri Lanka; Livelihoods, Gender; Livelihood Strategies; Vulnerability

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1. Introduction

Protracted conflicts give rise to particularly stark gender biases in livelihood of at risk populations. As these ‘less dramatic’ protracted conflicts are not as fervently studied as the more acute and more violent conflicts, studies that examine livelihoods in such settings are rare. This underscores the significance of the present study focusing as it does on how shoring up livelihoods in protracted conflict settings play out differently for men than for women. The Sri Lankan context within which this is done is also significant: after the end of the country’s war in May 2009 livelihoods of the affected have taken center stage.

The study of conflict induced vulnerabilities of women is important for three reasons. Firstly, a large number of the at-risk-populations are female. Secondly, the conflict driven vulnerabilities of women demand particular protection and assistance needs that exceed the needs of men (Erin Mooney 2007). Thirdly, even though with the protraction of the conflict women may suffer more than men, they also have central roles in coping and recovery (Janet Henshall Momsen 2004: 130). Sometimes, as is shown in this paper, the coping roles played by women can be more effective than those of men.

However, these works do not provide the quantitative rigor that is sought in the present work. Moreover, economic issues that surface in situations where women are internally displaced by conflict have also not been examined before this. Significance of the type and nature of work presented here is captured by Daley (1991:248) as follows: “Very few studies document the less dramatic transformation of women’s lives which occur as a direct outcome of forced displacement.” We argue here that though not dramatic economic issues are vital in engendering displacement.

Literature on feminist research methods is critical of ‘mainstream’ economic methods that rely only on quantitative data, as they are inadequate for analyzing feminist concerns (Jennifer C. Olmsted 1997; Michèle Pujol 1997). According to these critics “the survey data could tell only a very limited story, leaving out much important information” (Jennifer C. Olmsted 1997). Moreover qualitative techniques are useful to explore how market decisions and behavior interplay with non-market activities of a household (Diana Strassmann 2008). These techniques are effectively used to prove that non-market activities performed by women in a household are a decisive factor in

determining market based—mostly male dominated household incomes. For these reasons we have gathered qualitative information on our sample based on limited ethnographic study as well as lived experiences. These measures have greatly enriched (some times even altered) our research experience and have answered different type of questions than our quantitative or statistical analysis did. As a result we were able to uncover many asymmetric burdens of poverty born by women. This input from livelihood framework from within a protracted conflict setting is a valuable, and a unique, addition to the feminist economic scholarship.

This work also contributes to the literature on female headed households. In theory and in empirical work, most attention has been on *de jure* lone mothers who constitute a relatively clear-cut category and usually predominate over other types of female heads (Kanchana N. Ruwanpura and Jane Humphries 2004). Our definition of female headed household is also the same. We also appreciate—and our sample confirms this—the importance of the finer differences within this broad definition. For instance our sample had in it lone mothers, female-headed extended households, and female-singleton households, *etc.* We did not distinguish between these female-head types in this work. In addition, “quasi-female-headed households”—because of the difficulty in identifying them, and *de facto* female heads—because we were informed that the males made the important household decisions even in absentia, were categorized as male-headed households (Kanchana N. Ruwanpura and Jane Humphries 2004).

The rest of the paper is organized as follows. Section 2 is a description of the specific area of our field research, Medawachchiya. This is followed by an explanation of the process of gathering data and the methodology used in our study. In Section 4 we perform a cross sectional analysis of the complete sample in order to identify differences in livelihood outcomes across ethnicities and explain these differences using a strategy framework. Section 5 provides an in-depth analysis of strategies using five case studies. Finally, Section 6 provides some concluding remarks.

2. Life in Medawachchiya

Medawachchiya is one of the seventeen divisional secretariat divisions (DSDs) in the Anuradhapura district. Figure 1 maps the location of the DSD. The 37 Grama Niladari (GN) divisions within the DSD broadly represent the war affected rural economy of

Sri Lanka.² Though there has been very little direct violence in this DSD, it too has been shrouded by the omnipresent effect of the protracted conflict. In Medawachchiya DSD, 93.1% of the population are Sinhalese while the rest is mainly Muslims also known as Sri Lankan moor (DCS 2001). These ethnic groups are not evenly distributed in the DSD. For instance Muslims were clustered in GNs such as Ikirigollawa and Katuwala. The vast majority of these Muslims are IDPs who were displaced by the LTTE from the Northern Province in October 1990. They were formerly living in welfare centers for IDPs.

[Figure 1 about here]

Medawachchiya carries a military significance due to its location on the main supply routes to Jaffna, along the renowned A9 highway, and to Mannara, along the A14 (see Figure 1).³ The presence of several encamped military garrisons in Poonawa and Medawachchiya townships within the DSD proves this. Due to this military significance the GoSL has maintained a major security checkpoint at Medawachchiya since April 2007. Goods, services and civilians crossing this point were subjected to a thorough check. While the checkpoint was critical for the protection of the wider community it has had a significant impact on the livelihoods of the people who were compelled to cross it on a daily basis.

For security reasons no vehicles, under normal circumstances, were allowed through the checkpoint. This made it necessary that passenger and goods transportation along the A9 required two vehicles as goods and merchandise duly security cleared at the checkpoint had to be transferred to another vehicle on the other side of the checkpoint. This effectively prevented banned items from being transported across the checkpoint concealed inside vehicles. The residents of Medawachchiya, however, were treated differently. They could, after due clearance, obtain a special permit from Medawachchiya Police station to take their vehicles across the checkpoint. These

² GNs are the lowest level (at the village level) of regional administration in Sri Lanka. Several GNs together comprise a DSD, which is the next highest level of regional administration, followed by the district, made up of several DSDs.

³ Before the services to the North were disrupted due to the conflict, Medawachchiya was also a major junction of the railway network. Jaffna and Mannar were linked via this junction to the rest of the country. Figure 1 plots the railway tracks within the DSD.

vehicles were allowed to cross but only after the vehicles were thoroughly checked. All these measures while elevating protection levels did result in enormous delays, and costs with significant livelihood implications for those who crossed this checkpoint. Pradeep Jeganathan (2004) and Jennifer Hyndman and Malathi de Alwis (2005) provide in-depth analyses of checkpoints and their implications on societies.

3. Data and Methodology

The data for this work were obtained by interviewing a group of households randomly selected from Medawachchiya DSD.⁴ A structured questionnaire was administered to collect quantitative data. Interviews with relevant GN officers were also important sources of information. Where relevant, we used such information to triangulate the information furnished by the households. One research team consisting of four members was intermittently present on the field during November 2007 to January 2008 for this work and the team was headed by the first author.

The research was conducted in two of the 37 GNs in Medawachchiya DSD, selected randomly. The sampling unit was the household. A total of 82 cases were considered for this study: 43 from 568 households in Katuwala, and 39 from 345 households in Sangilikanadarawa. The population in Katuwala was of two types: 431 household were registered as permanent residents and 137 were temporary dwellers.⁵ We extracted a random sample from an amalgamated household list comprising of both these groups. The first group's information was taken from the 'voter registration list' and the second group's from the 'IDP list'(consisting of Muslims), both of which were maintained by the Katuwala GN officer. As there were no temporary dwellers in Sangilikanadarawa we used the voter registration list. The sample consisted of 81.7% male headed households; and 18.3 percent of female headed households. The average household size was four members.

Battles waging in Mannar during the data collection period posed severe problems for this research. This was right after the battles in the East had made GoSL victorious and operational focus was the North. It meant that the military significance of

⁴ This data was first collected for the work related to the Master in Economics (MEcon) thesis of the first author submitted to the Department of Economics, University of Colombo, in 2008.

⁵ The notion of 'temporary' in this context is not time bound and is an administrative categorization only.

Medawachchiya junction was at the highest level during this time. In terms of field level methodology we had to inform the Police at various levels of authority to obtain clearance to do research in this area. This clearance usefully smoothed the research process and helped at various checkpoints en-route to and within the villages we visited. As explained in the introduction we believe that the decision to focus primarily on livelihoods, and using that information to explore more gender sensitive protection and livelihood issues was also useful to avoid complications on the field.

4. Male Female Livelihood outcomes, strategies and assets in Madawachchiya: sample survey results

This section analyzes the total sample of 82 households. Sectoral composition of household livelihoods of the sample may be summarized as 27 percent in agricultural sector; 11 percent in manufacturing; and 62 percent in services. These numbers resemble the sectoral composition of the Sri Lankan GDP in Table 1. All of these sectors, as livelihood providers, have been affected by the war (Kopalapillai Amirthalingam and Rajith W. D. Lakshman 2009a, b). When asked whether the war had a *direct* impact on their current livelihood, 42 households (51 percent) responded with an affirmative. The reported direct impacts included market disruptions, insufficient demand for the household produce, soaring input prices and other additional costs. We emphasized the word direct because there were other households that reported indirect impacts of war upon their livelihoods. The reported indirect impacts of war included higher taxes (national security levy and nation building tax), protection related threats of random suicide bombings and other such attacks targeting civilians, and dilapidated rural infrastructure. However, for clarity in the remainder of the paper when we refer to conflict impacts, we actually mean direct impacts as indirect impacts are omnipresent and have affected *all* households.

[Table 1 about here]

These hardships resulted in various spontaneous and calculated responses (strategies) from households which we are interested in. We were particularly keen to investigate the gendered nature of these impacts and strategies. To do this the sample was segregated into four categories along the gender of the household head and the whether a war impact. It is important to remember that in this categorization ‘no impact from war’ actually means ‘no *direct* impacts from war’. The four categories

are: (1) female headed households with reporting conflict impacts (10 percent of the sample); (2) female headed households with no impacts (9 percent); (3) male headed households with impacts (41 percent); and (4) male headed households with no impacts (40 percent).

The extended DfID framework predicts that livelihood strategies or responses determine livelihood outcomes including household income. In this section we use household income (earned and non-earned) to approximate the livelihood outcomes of households as other livelihood outcomes suggested in the DfID framework are relatively more difficult to quantify. The rest of this section uses cross sectional methods to illustrate how household asset endowments determine their livelihood strategies and through that their livelihood outcomes. Each of these components of the DfID framework—assets, strategies and outcomes—are treated in separate subsections. However, this is done in the reverse order for ease of explanation.

Livelihood outcomes

The mean income levels compared across male headed and female headed households indicate that the income of the former (Rs.16,974) is higher than that of the latter (Rs.12,431). As this is likely to distort the comparison we also looked at the averages of per capital household incomes, which reversed the comparison. However it is likely that mean per capita income based comparisons are marred by biases generated from the general skewed nature of income distributions arising from the fact that they are truncated at the level 0 (Kopalapillai Amirthalingam and Rajith W. D. Lakshman 2009a). Therefore, instead of mean per-capita household income the median income per person is likely to yield a more robust comparison across groups such as the one attempted here. The median income female headed households only earned Rs. 2100 per person while male households earned Rs.3733.33 per person.

[Figure 2 about here]

We are also interested in the horizontal inequality between the two groups: female headed and male headed households. In Figure 2 we locate and mark the position of all households on the Lorenz curve of the sample. The mark identifies whether a given household is headed by a female or a male. For instance in Figure 2 the position of female households is marked with a black rectangle which enables the researchers to identify female households within different income cohorts. This

hybrid Lorenz curve with income cohort information can be used to infer information on horizontal inequality (HI) in addition to measuring vertical inequality (VI) which is the use of regular Lorenz curves.⁶ The hybrid Lorenz curve for the sample illustrates that 56 percent of the sample were living on a mere 30 percent of the income; let us call these “the poorest stock”. The figure, using the household identifiers, shows that 80 percent ($12/15 \times 100$) of the female headed households were among the poorest stock. Apparently, though the richest household in the sample is also from the female headed group, for the rest of the group the situation is bleak.⁷ In contrast to the female headed households, only 51 percent of the male headed households were within the poorest stock.

[Table 2 about here]

The Gini coefficient calculated based on Deaton’s simplified method were used to illustrate the VIs among the various groups we have identified here (Angus Deaton 1997). The overall Gini coefficient in Table 2 for male headed households was 0.34 while that for female headed households was 0.53. Clearly intra-group differences in income are more pronounced for female headed households than for male headed ones. It seems that while female headed households were earning a lower income compared to the male headed households, they were also scoring low in the comparison of equality within the gender-cohort. Table 2 analyses this further by looking at the Gini coefficients for the four household subgroups. Conflict impacted female headed households has a lower Gini coefficient (0.49) than the female headed households with no conflict impact (0.61). However, for the male HHs such inequalities were less prominent as the Gini coefficient for Male HHs who recorded direct impact of conflict on livelihoods was not so much different from those who recorded indirect impact of conflict on livelihood (respectively 0.32 and 0.36). Therefore, it is obvious that the conflict impact had acted as a determinant of income inequalities for females than males.

[Figure 3 about here]

⁶ Stewart (2000) discusses the concepts of HI and VI.

⁷ The richest household head receives the pension of her deceased husband as well as her salary from teaching.

The comparison of incomes can be made more meaningful by aligning it with poverty incidence. This can be done by incorporation the notion of the poverty line which we do in Figure 3. We use the official poverty line (OPL) of the north central province for the relevant period (Rs.2,567 per person per month) to distinguish the poor from the non poor in our sample. Once done it reveals that 37 percent of the male headed households live below the OPL. However, for females the figure is much worse and stands at the value of 50 percent. These facts have led us to some interesting puzzles. Why did female headed households fair less than male headed households? And in contrast to the females why were the male headed households more likely to escaped poverty when they had conflict impact on their livelihoods? The following subsections seek answers to these questions based upon the extended DfID approach.

Livelihood strategies

The unemployment figures in our sample draw a stark cleavage between female and male headed households. Unemployment among male headed households was a mere 1.5% while this figure among women stood at 33.3%. To put the same data in a different angle, female headed households comprised a massive 83.3% of the unemployed. This indicates weak access to income generating activities among women. It can be said that *Unfreedoms* such as unemployment have prevented members of female headed households from ‘leading the lives they have reason to value’ (Amartya Sen 1999).

Among those who found productive income generating activities, agricultural activities such as poultry, vegetable cultivation, and working as day laborers’ in paddy farming were seen more likely to be adopted by female HHs. Male employment in agriculture (farming, poultry and fishing) was a mere 1.4% of the total male population in the sample. In contrast, 26.7% of the total female population was employed in the agricultural sector. According to Leelangi Wanasundera (2006) ‘women’s role in agriculture expanded during the conflict period due to absence of males’ (Leelangi Wanasundera 2006). This female role and responsibility in agriculture has in fact can increase poverty and the demand for cheap female labor (Leelangi Wanasundera 2006). However, in this sample the median per-capita income to female agricultural workers were higher than in other activities indicating that females did earn better levels of income by engaging in Agricultural activities. This

level was even higher than the median per-capita income for males engaged in agriculture.

Females were also seen engaged in activities such retail trade and services sector activities. However their median income levels were always lower for all activities (except in agriculture) when compared to the median per-capita income the male HHs received.

In a discussion of livelihood strategies apart from main livelihood activities the strategies that were adopted by the households directly affected by conflict should be taken in to consideration. We have called these strategies as conflict livelihood strategies. Some of these strategies are employed to mitigate risk to livelihood disruptions due to conflict while strategies like enlistment, remittances, and trade with military create economic opportunities (can be viewed as a rent) to households. Table 3 summarizes the selection of conflict livelihood strategies by conflict affected households in the sample. Enlistment, migration, trade with the military and other power players, conflict related transfers, seeking out new markets to face mobility restriction, receiving remittances are the strategies adopted by the households to mitigate and to profit by conflict vulnerabilities. We note that some of these strategies are being practiced as a strategy mix by households. As the table is a household level analysis we list these mixed strategies separately.⁸

[Table 3 here]

Enlistment was a prominent livelihood strategy used by 14.3 percent of households in the sample. This is a very high proportion (by any standard) indicating two factors: (1) that there is a general lack of livelihood opportunities in this local economy, and (2) the returns (income) from enlistment, in the eyes of the villagers, more than compensate the personal risks thereof. The cases in this study are mostly non commissioned defense personnel who represent the lowest strata of military wages. In spite of that the households who used the enlistment strategy has a mean monthly

⁸ That way the percentages in the table can be interpreted as percentages of households.

income of Rs.19,666 as opposed to Rs.15598 earned by the rest of the households that did not use the said strategy.⁹

Monthly salary is not the only economic benefit from enlistment. In addition military personnel are entitled to various other economic benefits as well as non-economics benefits. Other economic benefits including low interest housing loans (to military personnel) were seen to improve assets bases of military personnel in comparison to others. Another important benefit from military service includes the development of human skills. Some in our sample after retiring from their military service were seen employed as electricians, motor mechanics, and drivers all of which skills were developed during their tenure with the military.¹⁰ This meant that the ex-service personnel in the sample had access to a dual cash flow: one a transfer (pension) and the other an earned income. Many of the combatants used to be farmers or youth who had been unemployed for a period of time. The war wages have brought about considerable changes in their lives which would not have been possible otherwise.

Despite its benefits this strategy was only employed by males of which 17.6% of them had found employment in the military with no female HHs recorded employment in military. It is not uncommon for females to be employed in the military, as personnel providing non-combatant services. However as female employment in the military is still at national levels very low, our sample did not capture any such cases.

The females nevertheless did indirectly was supported due to enlistment. This was in the form of pensions to widowed females and orphans of dead service personnel. Unlike in any other job government employment provides pensions to widows and orphans. And military pensions among the top most of such pension schemes. Of all conflict ridden female household heads 25 percent of them had access to defense pensions. Only a mere 2.9 percent of male headed households that had direct impact of conflict on livelihoods was entitled to defense pensions. The median per-capita income of male pensioners was Rs. 4000, while for widows this amount recorded Rs.

⁹ Income figures recalled by defense personnel in the sample survey are most likely to be understated as they were only able to give an income figure after the deduction of loan payments and other salary deductions.

¹⁰ It is important that in Sri Lanka the retirement is possible after either 12 years or 22 years for non-commissioned personnel.

8000. Apart from defense pensions, family members were also benefited through private remittances from service personnel. In this regard 12.5 percent of female household heads reported that they regularly received financial support from member services personnel. In our sample such remittance benefits were only reported by females.

Among the 42 households that had direct responses to conflict, some 7.1% identified the military as a new market to supply goods and services. The protracted nature of the conflict meant that these income flows too were continuous and were instrumental in generating a dependency amongst the people who benefited from the access to this dedicated market of the military. These new opportunities in the war induced economy had helped households to shape their livelihood responses. Again this strategy too was solely used by male headed households.

Disrupted transport systems create disruptions in markets. Disruptions to mobility are not uncommon in situations of conflict. Barriers to travel therefore will not only limit mobility of individuals but also the distribution of goods and services as indicated in the case studies. In response households found new ways to overcome this constraint, one of which is to abandon traditional markets (for inputs and for goods and services) and linking with new ones with more potential. A percentage of 26.5% male headed households (with direct conflict impact) were documented to have found new markets for goods, service or factors, while no females showed such levels of adoptability. New markets were found through friendship networks, external trade links and through connections to warring parties and local politicians.

Madawachchiya, as explained in an earlier section, has been an important host area for conflict displaced migrants mainly from Northern Province. Our sample too recorded that 52 households (63 percent) had in-migrated mainly to escape protection threats or livelihood threats due to war. These included both male and female in-migrants. Out of the total female sample population, 40 percent of females reported that their in-migration into the research area was due to conflict. For males this figure was at 23.9 percent. This is evidence that there is a gender bias in the use of in-migration as a response to violent conflict within our sample.

Conflict induced in-migrants (IDPs) also qualified to receive state and non state funds, in the form of consumption subsidies. IDP funding was received by 11.8 percent of male HHs and 25 percent of female HHs.

At the time of this research with the heightening of conflict and with the increase of the number of attacks by the LTTE against the civilian targets, security conditions around Madawachchiya had been a concern for many elements in its civil society. Hence, especially in Katuwala (which is closer to the main check point) there was a renewed concern for security and households were seen to take collaborative actions in helping the defense forces to maintain vigilance in the area. This interest in security was observed on the field in two situations: (1) formation of a civil security committee to maintain vigilance in Katuwala (2) conducting a project using community labor (*shramadane*) to clear shrubs along the A9 highway as these have been used regularly to hide roadside bombs. The civil security committee was headed by man in Katuwala and had the participation of both man and women. However, majority membership comprised of men and they seemed to be more active compared to the few female members.

It is evident that livelihood strategies discussed above did have implications for household protection. For this we first identified the various livelihood strategies found in the sample and then counted the frequency of their use across gender. What comes about is a partial answer to the puzzles we have recognized in the previous section. Firstly, it is clear that female household heads compared to males had limited opportunity in terms of livelihood activities. Secondly, the female heads had responded to conflict by increasing their reliance on external assistance, where their male counter parts had in fact found more rent seeking solutions apart from the mere reliance on external assistance. Therefore, in terms of income outcomes the male headed households had a better income outcome than female headed households, and did fairly well when their livelihoods were directly impacted by conflict.

This however still remains a partial answer because the asset endowment owned by each groups needed to be assessed in seeking out why the strategy sets of each group differed so much.

Livelihood Assets

Basic education benefits will transcend to personal levels and in addition a general expansion of education and literacy can facilitate social change and economic progress of a region (Amartya Sen 1999). Hence, household head's level of formal education plays a considerable role in deciding the livelihood strategies and outcomes of a household. Incidentally out of the entire male HHs only 46.2 percent received an education level below grade 10. However this figure for the female HHs stood at a staggering 80 percent, indicating low education endowments to female headed households. A further categorization across direct and indirect conflict impact on livelihoods indicates that only 38.2 percent of directly impacted male headed households reported a level of education below grade 10, whilst 87.5 percent of such female headed households recorded to be having a formal education level below grade 10.

Rotating savings (sittu) is a popular mode of informal saving in rural Sri Lanka. In the rotating savings system the members of the rotating savings group will meet at a designated time and place and each member will contribute an equal amount of money while one member (selected randomly) takes the whole amount once. As a result, each member is able to access a larger sum of money during the life of the rotation. And this rotation period is limited to a short period of time (e.g. 6 months). This reduces the size of the loss, should someone take funds early and default on payments. Thus, in determining the savings levels of households, cash amounts saved monthly in children's accounts (bank or postal), bank accounts, postal savings accounts, or money invested in rotating savings systems were taken in to consideration. Male HHs who had direct conflict impact on their livelihoods recorded a mean level of monthly savings of Rs 815.38 and compared to their counterpart Female HHs who only reported a mean monthly savings level of Rs.169.07. Males who had indirect who had direct conflict impact on their livelihoods recorded a mean level of monthly savings of Rs 705.50 and compared to their counterpart Female HHs reported a mean monthly savings level of Rs.442.85. This also shows that female HHs with direct conflict impact were less likely to have financial assets than their male counterparts.

Natural capital (or resources) usage of the incumbents of Madawachchiya was assessed through their entitlement to land. Cultivable land ownership varied among

households. Some households had only home gardens; others had home gardens and cultivatable land. Five cases reported to have only cultivatable land. Also there seem to be a relationship between war induced migration and land ownership. Nearly, 46.8% of cases that reported inward migration to Madewachchiya cited war as the main reason for their in-migration. Out of these migrants 81% of them reportedly had bought land after arrival. This is an indication of how ownership of land had transferred to direct conflict impacted groups from non conflict impacted groups. On the other had the ownership patterns also displayed gender biasness. Out of the female headed households that were directly impacted by conflict 62.5 percent purchased land (cultivatable and non-cultivatable) while only 50 percent of male headed households were compelled to purchase land for living and cultivating. In this case 32 percent of conflict impacted male headed households were fortunate enough to inherit land from their families in contrast to 12.5 percent of female HHs. There by the access to land for female HHs can be expensive compared to the access available for male HHs.

In regard to investing in housing-a process of physical capital creation, conflict impacted male HHs reported a higher percentage (44%) compared to those male HHs who had indirect conflict impacted on livelihoods (42.4%). This percentage was also higher than the percentages recorded for female HHs. Out of the female HHs who had direct impact of conflict on livelihoods 37.5 percent reportedly made investments on housing compared to the indirectly impacted female HHs who reported only a percentage of 28.6 percent. Therefore physical capital creation in terms of housing was also bias towards conflict impacted males than all females.

In considering other forms of physical capital most households had electricity(98%) but (through key persons interview data) it was evident that drinking water supply was inadequate (especially in Sangilikanadarawa) and road infrastructure and irrigation facilities were in dire need of maintenance in both GN divisions that were researched. Both males and female HHs irrespective of their conflict vulnerability faced hardship due to these impediments.

Social capital includes the organizations, networks and interactions that exist between community members on the basis of trust and civic mindedness. Political capital is the ability to use power in support of political or economic positions and so enhance livelihoods (Pari Baumann 2000). Households had friendship and relationship

networks that supported their livelihoods after migration in to Madawachchiya. Political assets that were created through net working with politicians and the defense forces and was vital in securing new markets and achieving better livelihood outcome. In this regard out of the total Male HHs that experienced direct impact of conflict on their livelihoods 26.5 percent reportedly had political assets created through networking with politicians and the military. None of the female HHs had any form of political capital but they possessed social capital, that helped them receive remittances, information regarding financial and non financial resource, goods and services that were necessary for having sustainable livelihoods. For instance the in-migrated (due to conflict) female HHs were supported by relatives and friends in seeking out schools for children, livelihood options and even land for resettlement. Females also reportedly took an active role in some societies in the area (increasing their stock of social capital), and these societies were instrumental in providing economic resources (such as drinking water, microfinance) and other societal resources. For instance we documented a female microfinance society which had nearly 100 members, such societies were instrumental in providing credit to females. In another instance, a community supported program for providing drinking water by the name of Janashakthi Praja Mula Sanvidanaya had provided 41 percent of the sample's households (headed by both males and females) in Katuwala with clean drinking water. The office bearers of this society were predominantly female at the time of the research. However, all offices in the farmer society (for both Katuwala and Sangilikanadarawa) were dominated led by males. Agricultural workers in Katuwala were of the opinion that these farmer societies were much politicized and were ineffective when it came to increasing farmer income. Politicized farmer societies are common occurrence in rural Sri Lanka because the majority of the voter base comprises of agricultural workers. However, in our sample, politicized male dominant farmer societies would not argue well for female dominant agricultural activities. Even the Civil security committee in Katuwala as we had shown earlier was led by males. Therefore, both political and social capital the female possessed does show inadequacies in terms of quality and quantity.

The evidence presented in this section clearly indicates that the asset distribution was unequal among male and female household heads. The male household heads had better levels of education, more savings, more physical capital in terms of housing

investments, better access to land resources, adequate social capital and most importantly they possessed political assets. The households headed by males who had more financial, physical and political capital than other male and female headed households responded and strategized well with conflict than others who were not so lucky. Hence, by using the DfID framework and extensions, it can be concluded that the disparities in resource endowments had led to differences in household strategy sets used by males and females resulting with unequal income outcomes.

5. Male vs. Female headed households: A closer look at disparities

This section, using a panel of case studies, discusses the livelihood strategies, assets and the income outcomes of some of the households in our sample. The case studies are also important to bring out household level strategies, and assets in the form of narratives which is again useful to ascertain the interplay between assets, strategies, and process and livelihood outcomes. In what follows we select a stratified sample of 5 households out of the main sample of 82 based on gender and conflict impact on livelihoods. Table 4 summarizes livelihood and protection strategies as well as incomes of the five households. The table reports monthly incomes from various livelihoods in Sri Lankan rupees (1USD=Rs.115).

[Table 4 about here]

Household 1 in Table 4 is a household with self proclaimed impacts from conflict. The household head is a 36 year old male. It has four members including two children aged 11 and 4. They had migrated from Kabithigollawa to Madawachchiya in March 2006 mainly to avoid protection threats, with the perceived level of threats heightened after a close relative was killed in a roadside claymore attack in 2006.¹¹ The respondent, the wife of the household head, clearly identified fear as the main reason for them migrating and migrating in a hurry. Relatives of the household had also helped in the process where the cost of building a new house and buying land had been partly borne by the respondent's brother. Migration, however, has had livelihood implications: the household had to relinquish claim for land in Kabithigollawa. The one acre of teak, coconut and banana which they had shared with a relative had earned

¹¹ Kabithigollawa has endured several devastating LTTE attacks during the course of the conflict.

them a monthly income of around Rs.5,000 to Rs.8,000. After settling in Madawachchiya the household head enlisted in the Army and was serving in Walioya. With the education of up to grade 11 he was able to qualify for armed services which paid him more than other non armed services income such as agricultural work. The household head's salary of Rs.24,000 per month is higher than the average non armed services income in our sample (Rs.15,598). Though the strategy of armed service did prop up household livelihoods it includes inherent protection issues. At the time of data collection Walioya, where the household head was serving was a forward defense area. Therefore this household head faced a grave risk of being disabled, killed or going missing in combat. What this entails for the protection of the rest of the family is obvious.

Household 2 is also male headed but unlike Household 1 the members of this household are traditional inhabitants of Madawchchiya. The 42 year old household head is an experienced baker who runs his own bakery with the help of his wife and the two sons. Their main problem, which directly affects his profit margins, is access to markets. The household head himself delivers the produce using a small van and a motorbike. Using the lull in the fighting during 2002-2003 peace treaty the business had expanded to the outskirts north of Madawchchiya; to places like Vauniya, Kabithigollawa and even to parts of Mannar district. But after the resumption of hostilities in 2004 and with attacks on civilians in these areas protection choices may have become more important to the household: they gave up their established market share and attempted to replace it with another. The household head used friendship and trader networks to reach new customers, mainly wholesale traders. These new markets were in areas south of Madawachchiya which offered relatively more protection. However the baker had to travel more to reach these markets with the effect that his transportation costs had increased. To this the response was to increase prices.

Household 2's experience with the military checks and mobility restrictions is worth a closer examination. The baker is clear that the amount of time he must spend at various check points during his delivery rounds costly to his business. In addition many a time delicate bakery products had got damaged in the process of checking. Nevertheless, taking a long run perspective, he also sees that these checks by increasing the general security are good for his business in the longer run. Increasing

prices of inputs, especially coconut oil and flour, is a problem that affects his profit margins. These can be attributed to general price hikes which are linked to the cost of war. The price of his bakery products had increased about 20% during the period of 2003-2007. This is a result of all the additional cost that had to be incurred as a result of war and the general price increase in the economy. Despite the numerous hardships the baker continues to engage in his chosen trade and makes a monthly profit of about Rs.25,000-Rs.30,000. The elder son of Household 2 is groomed to become the next owner of this small business indicating that in spite of the protection threats this livelihood may be sustainable.

Household 3 is female headed. The husband, an army deserter, had abandoned her after 6 years of marriage. She, a 31 year old is living with her 5 year old daughter and her 56 year old mother in a house that belongs to one of her brothers. She had been educated up to grade 10. She earns a monthly income of about Rs. 6000 by working as a female helper at a road side hotel.¹² The household head walks to work because she wants to save the Rs.6 bus fare and also to avoid the transportation delay due to the main check point. This meant that she had to walk about 2.5 Km to where she works and across the main check point in Madawachchiya. Her daughter is taken care of by her mother and the household head only spends the night hours with her son. The family has no other income source.

Household 4 is female headed. The household head's husband, an army soldier, was killed in action a year ago. This 34 year old household head was living with her two children in the house her husband was able to build with his army wages. The household head, a onetime teacher conducts privet tuition classes (at her home) for grade 5 students. She also receives a widow's pension amounting Rs. 30,000. The tuitions earn her Rs. 5000. Hence, she earns a gross income of about Rs. 35,000. Her education endowment (Passing Advance Level examination) had allowed her to become a teacher and the government assistance she gets of being a widow of an killed serviceman had allowed her to achieve a 'good enough income' compared other household heads.

¹² The kind of hotel this female is employed is a small scale venture where only food is being served. No lodging facilities are provided.

Household 5 is headed by a 56 year old female and she is occupied as an agricultural worker. She owns land—the half acre she dually uses for residence and cultivation. She had migrated to Madawchchiya 15 years back from (Yakkawawa) a border village that had faced, at that time, constant threats from the LTTE. She lives with her granddaughter and she was widowed by the demise of her husband, the grand-father of the girl, who was a driver attached to a government institution (non -military). She does not get any government assistance or a pension of any sorts, and when asked why (as the husband had been attached to a government job) she was reluctant to reply, so we had to speculate that the husband was either sacked from his job or the widow had remarried and was no longer qualified for the pension. She told us her cultivation work earns her a monthly income of about Rs. 6000. The cultivation included coconut, fruits (orange and plantain) and a few types of vegetables. The general price hike (at the time of the research) was in fact beneficial for this HH as she was able to profit from all her agricultural produce. In paddy harvesting seasons she would find additional income by providing her labour. That too had given her a substantial seasonal income (which is not included in the Rs. 6000, quoted earlier).¹³ The household head also gets around Rs.3000 per month as privet remittance from her brothers who were employed in the military. The household head has high hopes about her grand-daughter who at the time of the research, was studying for her ordinary levels examination. The household head who was educated only up to grade seven is happy that her daughter has had a better education than she.

The male household heads in the case studies have higher assets endowments: in terms of their formal and technical education, land assets, physical assets in the form of housing and machinery for business, vehicles (in the bakers case), compared to the female HH in case study 3, who seem to have very few asset endowments. In case study 5 the female had inherited cultivatable land, her only significant asset of which she seem to have been taking good use of. The female HH in case study 4 had better educational endowments and had sufficient assets inherited through the husband. Thus, these cases show that while men had a combination of assets females just had access to a prominent asset that had in the longer term been of more beneficial to them. (Case 4 had a better education-above the average among women, case 5 her

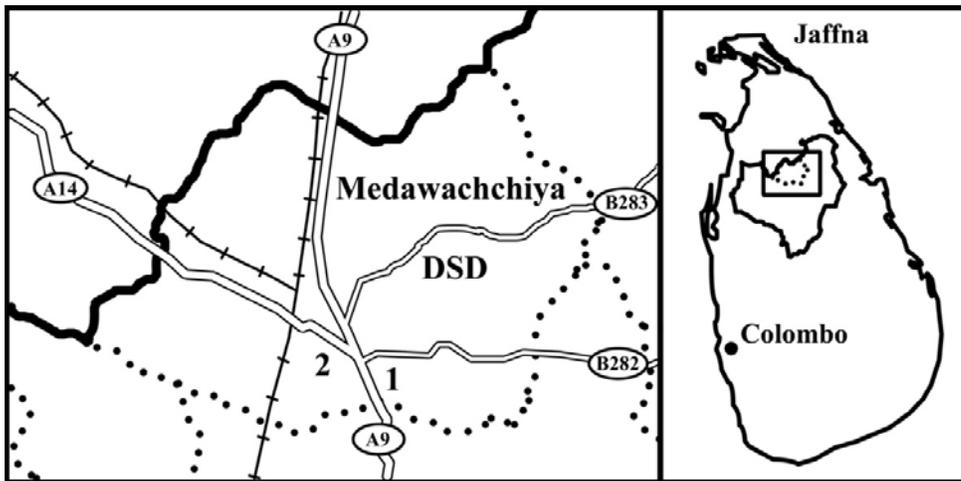
¹³ This household was not interviewed during a paddy harvesting season.

more land endowment). In terms of outcomes case 4's reliance on military pensions have ensured an higher income in par with the two male cases. The same can be somewhat said about case 5 too. The additional remittance income was what increased her monthly income, despite her having the same income as the 4th case.

6. Conclusion

The limited asset endowments of females had limited their strategies to a few and they seemed to end up producing less creative responses to war compared to their male counterparts. The reliance of external assistance is what had brought the female households above levels of poverty or deprivation. However, an economy cannot continue with conflict include rent and external assistance to increase household levels of welfare. Therefore, in a post conflict setting more assets must be distributed among females and their empowerment must be given priority in any development policy initiative.

Appendix



Source: Based on Survey Department, and Road Development Authority, GoSL

Figure 1: The area map of Medawachchiya DSD. In both main and inset maps Anuradhapura district boundary is identified with a solid line and Medawachchiya DSD with a perforated line. The numbers 1 and 2 locate Sangilikanadarawa and Katuwala respectively. The main map also traces road (A9 leads Northwards to Jaffna, and Southward to Kandy, A14 to Mannar, B282 to Trincomalee via Horowpothan, B283 to Kebithigollawa) as well as railway networks in the area with a view to illustrate that both have a major junction situated within Medawachchiya DSD.

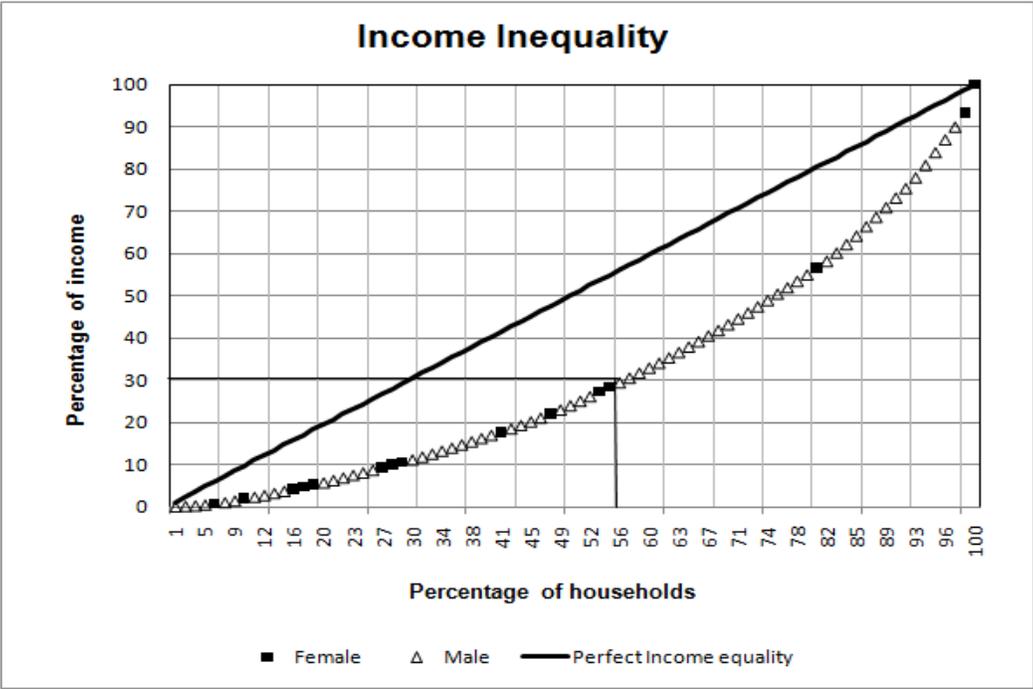


Figure 2: Relative income distribution. Female headed households are represented by black rectangles while the male households have been depicted by white triangles. The highlighted horizontal and vertical grids are demarcating the area under which a majority of female headed households lie in the income distribution curve. The diagonal line represents the perfect income equality line.

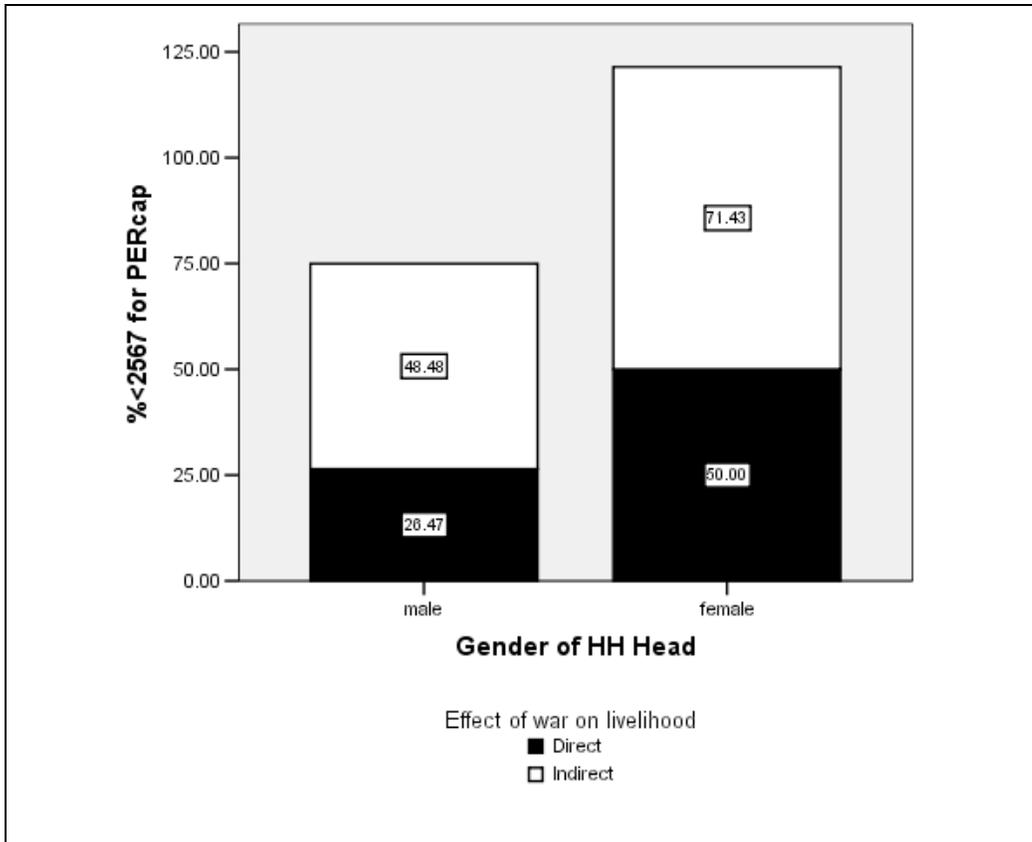


Figure 3: Percentage of male and female headed households below the poverty line. Black bars represent both males and females who reported to have conflict impact on their livelihoods and the white bars represent those households that did not have any direct impact of conflict on their livelihoods.

Table 1: Sector contributions to GDP and employment percentages

Sector	As a share of GDP		Employment (as a percentage of total employment)	
	2007	2008	2007	2008
Agriculture	11.9	15.1	31.3	32.7
Manufacturing	28.5	28.3	26.6	26.3
Services	59.6	56.6	41.2	41

Source: Central Bank of Sri Lanka Annual reports, 2007 and 2008

Table 2: Income inequality

Gender and war impact	Gini Coefficient
Females with direct impact of war on livelihoods	0.49
Females with indirect impact of war on livelihoods	0.61
Males with direct impact of war on livelihoods	0.32
Males with indirect impact of war on livelihoods	0.36
All females	0.54
All males	0.34
Total sample	0.38

Note: Gini coefficient, G , is calculated using: $G = \frac{N+1}{N-1} - \frac{1}{N(N-1)} \sum_{i=1}^N (2i-1) X_i$ (Angus Deaton 1997). Here

u is the mean income of the sample. P_i is the income rank P of person i , with income X . The richest person receives a rank of 1 and the poorest a rank of N .

Table 3: Strategy sets by Gender

Strategy	Gender		Total
	Males	Females	
Enlistment	17.6%	0%	14.3%
Gains from links with the military (new markets)	8.8%	0%	7.1%
Defense pensions	2.9%	25%	7.1%
In-migration and enlistment	5.9%	0%	4.8%
In-migration and IDP benefits	11.8%	25%	14.3%
Seeking new markets	26.5%	0%	21.4%
In-migration	26.5%	37.5%	28.6%
War related Remittances	0%	12.5%	2.4%
Total	100.00%	100.00%	100%

	Household 1	Household 2	Household 3	Household 4	Household 5
Location	Sangilikanadarawa	Sangilikanadarawa	Katuwala	Katuwala	
Respondent	Acting HH (Wife of household head)	Household head	Household head	Household head	
Gender	male	male	Female	Female	Female
Direct impact of conflict on livelihoods	Yes	Yes	No	Yes	Yes
Assets	Land and house, education above grade 10	Land and house, skills to be a baker, a bakery business with an initial capital of about Rs. 250,000. A motor cycle and a van.	An education level of grade 10.	Education above grade 10, house and land	Education Below grade 10, land and house
Main livelihood	Army soldier	Baker	Hotel worker	Teacher	Agricultural Worker
Other Strategies	This household's previous place of residence was Kabithigollawa in the district of Anuradhapura. Their migration into Medawachchiya can be seen as a forced migration triggered by fear of attacks on civilians. The household head was an Army soldier and was stationed at an operational area. His livelihood involves significant risk to life.	Faces subsistence/livelihood hardships due to war. The baker faces mobility restrictions as a result of the fear to travel. This had prompted him to seek alternative markets and demand bases. Cost of production of bakery products had increased as a result of the travel distances between alternative markets, general price hikes of the economy had increased costs, and there is a security related cost in terms of delays and damage to goods. Appreciates the security provided by check points.	Faces mobility restriction and delays at check points.	Is provided with a defence pension after the death of the husband, this income is 6 times more than what she earns as a tuition teacher	Is entitled to private remittances from brothers in the military, which increases the monthly income. Migrated to Madawachchiya from a terrorist attack threatened area. The general price hike has increased her income levels

Monthly income	Rs.24,000	Rs.25,000-30,000	Rs.6000	Rs. 30,000	Rs. 9000
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Table 4: Household Livelihood strategies and the resulting monthly incomes. Monetary values in Sri Lankan Rupees (1USD=Rs.116)

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