

Explaining Why Poverty Persists in the Rural Hinterland: How Useful is the 'Poverty Trap Framework' ?

The Setting

Poverty in the rural and estate sectors persists notwithstanding the precipitous reduction of urban poverty on the one hand and the concerted efforts by the state for almost two decades to alleviate poverty on the other. By 2002 the head count poverty (HCP) of the rural sector lingered around 24 percent. Although this situation appears to have changed by 2006/07, it is premature for us to conclude that the worsening trend of non-urban poverty is completely reversed. The situation is alarming as every one third to one fourth of non-urban households fall below the poverty line.¹

Three conditions have made rural poverty a major policy issue. Firstly, non-urban poverty collectively explains more than 90 percent of the country's total poverty. Secondly, rural poverty is highly transient where HC poverty fluctuates radically in response to different covariant and idiosyncratic shocks that move them 'into' poverty.² The poor in these areas are handicapped by the absence of fall back arrangements like access to formal credit or insurance to withstand these shocks. Thirdly, conditions such as 'poverty trap' that are peculiar to the rural sector have made the incidence of poverty more acute and persistent.³ This paper argues that in the context of the rural hinterland it is the 'poverty trap' at household levels that generates a process of circular causation leading to 'chronic poverty'.⁴

The reduction of urban poverty in Sri Lanka is plausible because the post-reform policy framework was fundamentally pro-urban. A disproportionate share of economic dividends in the spheres of trade, industry and employment opportunities is apportioned to the urban sector (World Bank, 2007). In this sense, the persistence of rural poverty is largely policy driven. The situation is aggravated further by the incidence of the poverty trap that has resulted

in the creation of 'pockets of poverty' in the rural hinterland.⁵

Objectives of the Paper

The paper attempts to address the following two research questions:

- 1 Is rural poverty distinctly different from urban poverty?
- 2 What insights can we draw from the 'poverty trap framework' to explain this distinct phenomenon?

The methodology

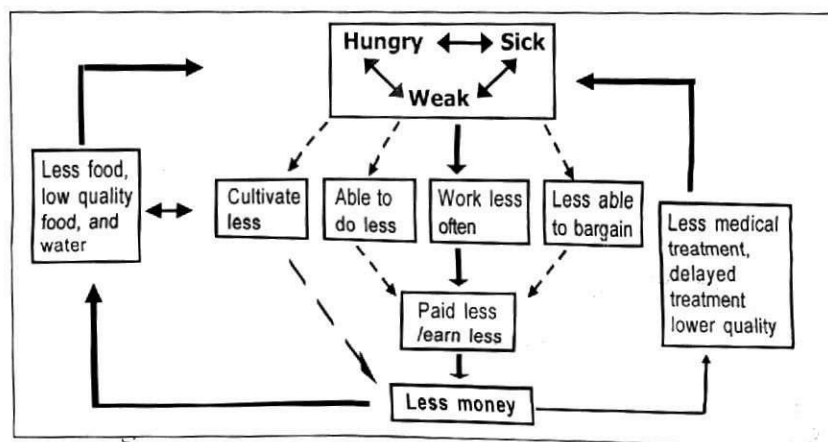
The paper employs the poverty trap framework of Narayan et al (2000) to explain the incidence of poverty in the rural sector with special reference to the rural hinterland. To assess the general pattern and conditions of the poverty trap the paper uses secondary data drawn from the Consumer Finances and Socio Economic Surveys (CFSES) of the Central Bank of Sri Lanka. To explain the conditions in the rural hinterland the paper depends on custom made case data collected through a series of questionnaire surveys conducted at the Suriyawewa and Lunugamwehera DS divisions of the Hambantota district.⁶

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Figure 1 below illustrates the processes of and linkages between the different conditions that reinforce the poverty trap. It shows how, for instance, low cash income leads to physical incapacities that arise from malnutrition which in turn reduces the cash income of the poor. The peasants who are poor are undernourished; they become less agile; fail to work long and productive hours; and hence are unable to generate surpluses. The 'lowness' of economic surpluses also downgrades their bargaining power with respect to wage work, claim for higher wage rates and better farm-gate prices. This process thus leads to a circular causation with a number of feedback loops all directed at exacerbating poverty and destitution (Narayan et al, 2000). These are circumstances beyond their control. As the 'trap' becomes cumulative, each loop reinforces the other. The poor get trapped into a vicious circle unless effective public action is initiated to reverse it. Ad-hoc poverty reduction measures such as income assistance by the state and non-state agents fail to break this trap.

Figure 1
Poverty trap at the Level of the Individual



Adopted from, Narayan et al, (2000, Figure 5.1.).

What does the National Data Indicate?

One of the most unrelenting problems of low income is its negative effects on family budget which lead to a situation of dis-saving.⁷ Those in the lower income brackets spend more than they earn because their earnings are insufficient to meet even the basic consumer needs let alone augmenting investments to improve their conditions.

The Consumer Finances and Socio Economic Surveys of 1996/97 and 2003/04 have shown that the real income of households has declined for the rural and estate sectors especially for the poorest income deciles. Further, the real income of spending units has declined in the provinces of Sabaragamuwa and Uva which are considered backward.⁸ Similarly, the income-expenditure gaps have worsened for the estate sector followed by the rural sector. The estate sector, for instance, has registered negative unadjusted savings of 16.7 percent for 2003/04. The situation in the rural sector is only slightly different as the unadjusted savings are a meagre 1.5 percent.⁹ The bottom most income deciles suffer dismally.

According to the CFSES 2003/04 the three bottom income quintiles have recorded dis-savings of varying magnitudes.¹⁰ It simply means that on the average only the richest two income quintiles have generated income surpluses. More than 73 percent of the households in the poorest income quintile dis-save. About 60.1 percent of the second income quintile too dis-saves. It shows that an alarming ratio of households within the poorer income quintiles find it difficult to meet even their basic household expenses.

The low and falling real income and increasing expenditure manifest the most important aspects of the poverty trap in the rural and the estate sectors. Two interrelated macro-economic conditions have worsened this situation. They include the continuous process of worsening income inequality by deciles and regions, and the inflationary trends that eroded the earnings of the poor in real terms.¹¹ These manifestations have given rise to an emergence of an 'underclass' that is profoundly deprived in terms of low income, poor health, malnutrition and poor hygiene.

Consequently, poverty becomes a manifestation of income inadequacy or consequently an under-provision of entitlements. Ironically, the coping strategies adopted by the poor include curtailment of their food intake, postponement of medical and educational expenses, disposing critical assets such as cattle and land, drain the accumulated savings and borrow from informal sources at prohibitive rates of interest which eventually move them along the downward spiral of poverty.¹² The selling of critical assets like cattle or fertile land for instance shrinks their income potential. Similarly, failure to invest on essential implements and other forms of physical capital like dug wells and irrigation canals undermines their income potential. Second, malnourishment or unattended morbidity makes them physically weak, and hence incapable of contributing to income generation at their optimum levels.

Meanwhile, the dearth of public investments on education has a crippling effect on equity in terms of access to high quality inputs on education.¹³ This has to be assessed in the context of the strong negative correlation between the level of educational achievement of the household head and the incidence of poverty in Sri Lanka.¹⁴ Another manifestation of inequity is the dearth of public investments on health and sanitary requirements that deny the human capabilities of the poor. Information produced by the CFSES shows that only 20 percent of the households in the rural sector has access to pipe-borne water that compares with a huge 85 percent for the urban sector for 1996/97. Similarly, households without any form of latrines are only 1.9 percent for the urban sector that compares with 6.1 and 22.9 for the rural and the estate sectors respectively. It is in this context that a series of micro studies are conducted to delineate the nature and problems of poverty

pockets in the backward districts such as Hambantota.¹⁵

Poverty Trap and its Effects on Family Welfare-Micro Data

The income and expenditure trends presented above do not show the patterns of poverty incidence in the rural hinterland especially with respect to the so-called 'pockets of poverty'.¹⁶ The rural hinterland which is cut-off from the rest of the country; even the minimum requirements of physical and institutional infrastructure are missing in these rural villages. They are inaccessible because of the poor conditions of roads and absence of public transport. Years of neglect have made the irrigation infrastructure unserviceable. The villages are further alienated on account of the lack of arrangements to market agricultural produce, lack of input supplies, agricultural extension and banking services. The isolation of these villages has worsened the living conditions of the peasantry.

Table 1 below highlights income-expenditure gaps at household levels. Firstly, income levels in terms of nominal and real terms have increased during 2003-2006. Since 2006 the policy framework of the country became rather pro-agricultural which is characterized by the re-introduction of the fertilizer subsidy and increased farm-gate prices of paddy. Besides, the construction boom in the district of Hambantota provided casual work for the unemployed while the receipt of irrigation water from the Lunugamwehera and Mau-Ara schemes contributed to raising agricultural output and farm income. The world-wide shortage of food grains helped this situation further.

Table 1
Income expenditure data and the incidence of dis-savings

No	Indicator	Suriyawewa N=112 (2003)	Lunugamwehera N=105 (2004)	Suriyawewa and Lunugamwehera N=294 (2006)
1	Income in real terms	47334.00	54864	60665
2	Expenditure on consumption in real terms	30423	30342	29238
3	Cost of production of paddy	30010	32651	34100
4 = (2+3)	Total expenditure-nominal terms	60433	62652	63338
(4-1) / 1 × 100	Expenditure-income gap	28	12.4	4.2

Sources: Field Surveys by the Author

Ironically, despite these positive developments the consumption expenditure of households did not increase in real terms during this period. Two factors have contributed to this anomaly. The most outstanding factor was the escalation of the cost of production. The second factor was the increased cost of living. The price increase of sugar, dhal, kerosene oil, cooking oil, food grain etc., has contributed to the reduction of real income of the households.¹⁷ The two conditions have emaciated the entitlements of the households as reflected in the dwindling real expenditure on consumption.

However, the gap between income and expenditure that was as high as 27 percent in 2003 has fallen to 4.2 percent by 2006. Yet the average expenditure of farm families still exceeds their average income thus giving rise to a condition of dis-savings. It continues to affect the farm households via a 'debt trap' where the poor spend most of their farm income to service the old debt. Much of this debt is linked with agricultural work. The failure of the formal banking arrangements to reach out to these villages has aggravated this condition further.

The fall of expenditure in real terms on food may be severe on women and old people. The shortage of food on children is long-term as malnutrition retards their growth process. Findings of national level surveys have revealed that malnutrition among children is as high as 13 percent while about 30 percent of them suffer from anemia.¹⁸ This study showed that women suffer silently when mothers make more sacrifices in terms of food and non-food consumption. The postponement of medical expenses by the adult women is one of the first causalities of the budget cuts arising from falling family income. According to DHS data the reasons for this postponement include transportation problems, lack of funds, and non-availability of medical facilities in the close vicinity.

The male members of households are not spared from this situation. The shrinking food budget affects their ability to secure jobs and earn reasonable wage rates. *The poor health-low*

wage loop causes malnutrition among household heads reducing their capacity to earn as wage workers or farmers. As will be revealed later the incidence of malnutrition is high among the male heads of the households too.

Conversely, any realistic change of their conditions should indicate that they have been able to generate net-savings and / or capital investment so as to break the cycle of the 'poverty trap'. Investments on working capital may help them to maintain the status-quo. However, for them to come out of the 'poverty trap' there is a need to increase the capital stock: this includes improvements in the farm structures, irrigation network, farm modernization, diversification of crops, access to food processing and marketing facilities etc. The data on income and expenditure flows presented above show that these changes are too slow to come by. Therefore the income expenditure gaps outlined above give rise to recurrent problems of chronic poverty. Table 2 below elicits two salient features pertaining to this phenomenon of chronic poverty.

Firstly, the incidence of poverty in the district is extremely much than the rates quoted by the national sampling surveys of the DCS. According to the DCS reports the poverty level of the Hambantota district was about 32.2 percent for 2002. By 2006/07 it declined by 19.5 percentage points (153 %) to 12.7 percent. However, the evidence gathered in this research refutes this contention (See Table). The persistence of HC poverty in the villages may be partly due to the 'central tendencies' of the national surveys resulting from the non-inclusion of some of the worst affected villages. It is also possible that the sample data 'crowds in' those areas that have fared badly.¹⁹

Secondly, the sharp increase of the poverty threshold used for this study too may have aggravated this situation. The higher the poverty line adopted for the computation of HC poverty, the greater would be the HC poverty. The inflation adjusted poverty line used for the computation of 2006 data is about 34 percent higher than the 2004 poverty line.²²

The HC poverty figures of more than 69 percent for 2003 and its persistence in the subsequent panels is distressing. The higher coverage of poverty assistance of over 62 percent for the villages shows that the above figures support this high incidence of HC poverty.²³

The Table shows that the percentage of households receiving Samurdhi assistance has increased marginally. The average Samurdhi grant per household too has increased in nominal terms by 2006.²⁴ However, in real terms, the grant per household has fallen by 24 percent by 2006. The reduction of Samurdhi assistance in real terms and the non-inclusion of those who deserve such assistance formed two major weaknesses of the Samurdhi programme. The insufficiency of the Samurdhi grant per household and targeting errors have made poverty reduction efforts of the state rather futile.²⁵ On the whole information presented above shows that the incidence of poverty is acute in the study area by whatever standards adopted to measure it.

Interestingly, the expenditure on food items is very low in absolute terms for the poorer income deciles although as a percentage of their total expenditure it has reached a staggeringly high level of more than 90 percent.²⁶ This situation

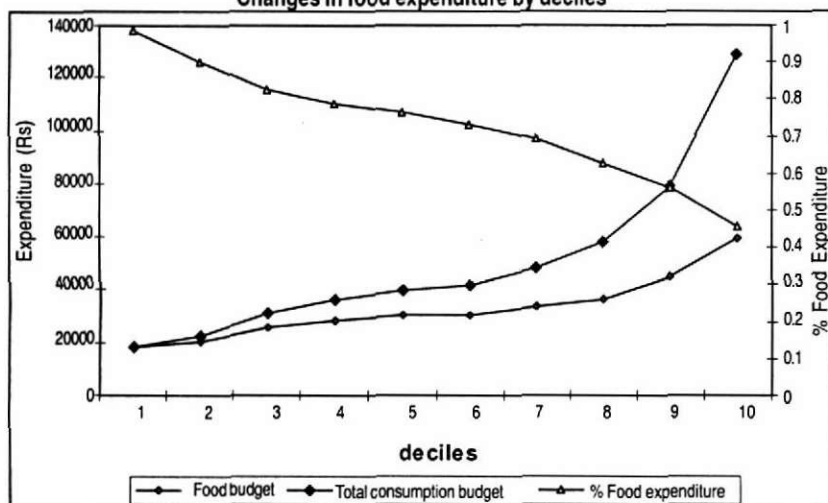
has two implications. In absolute terms it shows that they survive on the barest minimum level of subsistence, i.e., a state of 'emaciated entitlements'. The fact that they spend

Table 2
Computation of poverty HC and Poverty Assistance data

Indicator	Suriyawewa N=112 (2003)	Lunugamwera N=105 (2004)	Suriyawewa and Lunugamwehera N=294 (2006)
Poverty lines ²²	1406	1530	1889
Poverty threshold per annum ²¹	67849.5	76946.9	93426.768
Poverty HC	69.1	72.6	70.8
HH on Samurdhi	62.5	64.1	64.1
Average Samurdhi grant (Rs)	470	430	480
Samurdhi grant (real terms)	470 (100)	395 (84%)	359 (76%)

Sources: Survey data

Chart 1
Changes in food expenditure by deciles



Source: Survey data

a huge share of their expenditure on food implies that they are left with very little income to meet their non-food requirements including health, transportation and education. According to Chart 1, almost up to the 4th decile the households are spending more than 80 percent of their income on food leaving very little margin for expenses on the development of human, physical and financial capital. Despite this high share of food related expenditure many of these households failed to secure 'two square meals' a day.²⁷

One of the major causes of low income and hence high incidence of poverty is the lack of regular employment.²⁸ The study revealed that the ratio of daily status unemployment is four times higher than the national average of 8.9 percent. The economic profile of the Divisional Secretariat of *Suriyawewa* too came out with an unemployment figure of 38 percent for 2002 for *Suriyawewa*.²⁹ This figure compares well with the estimates we have made in our survey.³⁰

In practice, most of those who were classified as 'employed' are farmers and wageworkers: they in fact are 'idle workers'. At any given point in time work available for them in terms of 'hours' or 'days' work is below their capacity and willingness to work. This has given rise to an acute problem of underemployment among those who consider themselves employed. The *Suriyawewa* case study revealed an underemployment figure of 76 percent among

Table 3
Data on Malnutrition and Morbidity

Indicator	Weheragala N=13	Angunukolawewa N=10	Lunugamwehera N=105
Body-mass index (mothers) ³⁴	38%	50%	22%
Signs of malnutrition of fathers ³⁵	46%	40%	28%
Cases of unattended morbidity	49.6	51.2	34.3

Source: survey data

those who claimed themselves as employed. This rate was almost three times the CFSES assessment of underemployment for the rural sector of Sri Lanka.

Two manifestations have made the impact of unemployment especially distressing. Firstly, workers do not have adequate work opportunities in terms of number of hours per day or days per month. On the average two days a week was the number of 'full' days of around eight (8) working hours reported in the survey. Secondly, even when they can secure work, the wage rate tends to be low during the off-seasons due to the depleted demand for labour in relation to the supply of labour. The wage rate quoted in 2004 was Rs. 200 (US \$ 1.9) per day.³¹

The very high incidence of self-employment, casual employment and unpaid family work, reflects the 'distress-adaptation strategy' followed by the peasantry for survival. Because there are too many workers whose services are available for casual wage work, the rates quoted are about 30 percent less than the national agricultural wage rates.³² These figures contradict the notion that the

wage rates are prohibitively high for agricultural work in the peasant agricultural sector. In fact there is a severe scarcity of work opportunities during the off-periods which span a much longer time. The reserved army of unemployed youth suffers on account of the twin evils of lack of work and falling wage rates during this period.³³

Table 3 below shows that the impact of these conditions has seriously undermined the nutritional and health standards of the poor. This data were elicited by a team of trained midwives. The BMI data shows that malnutrition is relatively high for the DSA of Lunugamwehera but extremely high for the two poorest villages. It is evident that the poverty-malnutrition nexus

is clearly established. As revealed by Narayan et al, the poverty-malnutrition loop works

both ways reinforcing the incidence of malnutrition among the poor and vice versa.³⁶

While the domestic production of food-grain is inadequate to feed the family members, the limited cash income has curtailed what they could purchase in the open market. This has caused 'an entitlement failure'. The conditions of malnutrition measured in terms of BMI and other proxy measures have indicated that signs of malnutrition are widespread among the adults. Thus the vicious conditions of poverty and the related outcome of malnutrition have exacerbated the process of the poverty trap in the villages selected for this study.

Discussion of Findings

The findings of this study show that the incidence of HC poverty is extraordinarily high for the villages studied; it also reveals that despite some improvements in the income levels of the peasant families the HC poverty continues unabated. Although the situation is distressing, this paper does not want to generalize its findings to the entire country or even to the district of

Hambantota. It only highlights the condition of existence of extremely poor areas that are known as 'poverty pockets' and the conditions of these poverty pockets may be better explained in terms of the poverty trap.

The paper shows that in the villages studied the situation is critical in terms of low income, problems of expenses exceeding the household income and eventual outcome of indebtedness. A substantial share of the population spends more than 80 percent of their income on the food budget but still fail to meet the bare minimum food requirements.

The shortage of food grain causes malnutrition that makes them vulnerable to epidemics such as malaria, diarrhoea, and tuberculosis. Consequently, farm households fail to reap the full potential of their farm plots. They also fail to secure work in the farm or the non-farm sector as work opportunities are limited relative to the number of people who seek work during the off-season. While their income dries-down, expenses remain almost stable. The low educational attainment compounds this situation. The household-heads who are illiterate suffer from lack of skills that reduce their ability to choose better technology, market information and bargain for higher prices or better wages.

The initial condition of low cash income leads to physical incapacities arising from hunger, sickness, and lack of physical agility which reduces the capacity of peasants to work more and earn more. They fail to buy nutritious food, timely medical treatment etc. that perpetuate their low income and the capacity to bargain for better wages. These are circumstances that are beyond their control. It demands an active role of the state in terms of 'public action'. However, the poverty alleviation programmes appeared to have failed to make a substantial dent in this regard. The reduction of public investments under the structural adjustments in the 1990s has made the situation much worse. It is therefore necessary to gauge the nuances of this process that engender persistence of poverty in the rural sector. The idea that 'one size fits all' does not work for poverty reduction

as conditions that govern poverty differ by sectors, regions, districts and also by income deciles.

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Footnotes

¹ Using HIES data it is estimated that one out of every third household in the estate sector or one out of every fourth household in the rural sector are poor by 2002.

² Poverty trends in the estate sector have been persistently worsening during the past two decades.

³ A number of authors like Sacks (2006), Matsuyama (1991) and Narayan (2000) have defined poverty trap differently. This paper uses the definition of Narayan et al that identified it in terms of 'cumulative causation with a number of feedback loops that reinforces the conditions that engender poverty'.

⁴ See, www. Chronic poverty centre of the Manchester University (2008)

⁵ These pockets of poverty register incidence of poverty which are unusually high in comparison with the national or sectional aggregates.

⁶ These surveys are part of an on-going project on poverty dynamics and were conducted in 2002, 2003 and 2006.

⁷ It arises when expenditure exceeds income leading to indebtedness or drawing-down the limited capital stock.

⁸ See, HIES data base of the DCS.

⁹ The concept of unadjusted savings refers to the difference between total income and total expenditure. It does not make adjustments for expenses on jewellery and consumer durables which are accounted as savings under adjusted savings.

¹⁰ In terms of deciles only the top two deciles have been able to make positive savings.

¹¹ Although poverty data for 2006/07 have shown a sharp decline in the urban and rural sector, there is no information as to whether income inequality too has shown a substantial decline. In the meantime the inflationary trends have worsened seriously undermining the consumption levels of the poor.

¹² In the absence of formal sources of credit the poor resort to informal sources which include low cost credit sources such as friends and relatives and high cost sources like money lenders.

¹³ Expenditure on education by the state as a ratio of the GDP has fallen over the years.

¹⁴ It is argued that 'a household is less likely to be poor when the head has an education at the A- Level and above' World Bank, 2007, p.25.

¹⁵ Hambantota is one of the districts where the incidence of poverty has fallen drastically by 2006/07. There is no agreement on the causes of this decline especially in the Southern province

although the massive public investment programme on infrastructure could be one of the dominant causes. Here again these investment programmes have a natural tendency to bypass the hinterland as the process of trickling down does not reach out to these poverty pockets.

¹⁶ The presence of these pockets of poverty is not an isolated situation as many would want to argue. In fact it is widespread in the districts of Hambantota, Moneragala and Badulla.

¹⁷ It must be noted that a substantial share of the agricultural population is net consumers of food grain.

¹⁸ The age group referred to here is between 1 to 60 months.

¹⁹ An inherent weakness of the national sampling surveys is the central tendency and this is precisely why micro studies should be conducted hand in hand to show some of these deviations.

²⁰ In the absence of district or provincial inflation rates the district poverty line of 1334 (2002) for Hambantota district was adjusted for inflation using the GDP deflator.

²¹ The District level poverty line for Hambantota for 2002 was 1334. This was adjusted for 2003, 2004 and 2006 using GDP deflator that gave rise to poverty lines of 1406.5 for 2003, 1530.3 for 2004 and 1889.7 for 2006. The aggregates were computed using the sizes of households for different years.

²² The absence of district-wise inflation data tends to inflate poverty incidence.

²³ The data bases maintained by the two DS offices also justify our contention.

²⁴ This increase in the average Samurdhi grant in the area is an outcome of the upward revision of Samurdhi benefits since 2005.

²⁵ Ideally screening poor households is less problematic in these communities where everybody knows about the economic status of each household. A government functionary can make a fairly accurate determination on income levels by looking at the conditions of houses and the other assets.

²⁶ One of the crude measures of poverty is that the poor spends more than 80 percent of their income on food but fail to purchase even 80 percent of their food requirements.

²⁷ Although they spend more than 80 percent of their expenditure on food they still fail to secure even 80 percent of their food energy requirements.

²⁸ According to human poverty index II (HPI-II) of the UNDP, unemployment was considered as one of the salient features of human poverty.

²⁹ The socio-economic profile of Suriyawewa (2002), has estimated that the three villages of Weliwewa, Ranmuduwewa and Andarawewa have a labour force of 1895 of which 715 are unemployed (DS, 2002; 21).

³⁰ Villagers cannot remain unemployed for the simple reason of survival, making the

determination of unemployment a complex issue; they perceive themselves as farmers (Govi) or wagedworkers (Kulikaru) and hence consider 'employed'.

³¹ This was 71 percent of the wage rate quoted (Rs. 280) for agricultural work by the CBSL.

³² Two important considerations affect this difference in wage rates. First, these are rates for peak seasons where the demand for work is high. Second, having a large reserve army of unemployed contributes to pull the wage rates down in sectors where workers are not organized.

³³ Most of them belong to the youth category who may not be interested in farming which is economically unrewarding and socially stigmatized.

³⁴ Body mass index (BMI) uses a ratio of (weight in kg) / (height in meters squared) to measure malnutrition. The BMI of mother's that falls below 18 was considered malnourished.

³⁵ In the case of men signs of malnutrition included aspects like angular stomatitis, glossitis, and anaemia which were diagnosed by the public health staff.

³⁶ Individuals who are sick or disabled are less likely to be hired for wage work, may have difficulty working effectively, and will often be paid less for their services (Narayan et al, 2000, p. 96).