

# **Provincial and Rural Development**

## **Economic Impact of Rural to Urban Temporary Labour Migration on Farming Communities in Sri Lanka**

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**Key words:** *Rural to urban labour migration, Remittances, Regression Analysis, Agriculture communities in Sri Lanka.*

### **Introduction**

Migration is considered as the oldest action against poverty. However, temporary labour migration from agriculture/rural sector is considered as a universal concomitant of economic modernisation. The increasing attention on rural to urban labour migration research has simultaneously generated different views regarding the pattern of migration and the impact of remittance inflows.

Sri Lanka has experienced a large movement of rural labour, which is predominantly agricultural, seeking employment opportunities in Export Processing Zones since economic liberalisation in 1977. However, there is no substantial endeavor to identify the magnitude of temporary labour migration and to quantify the impact of rural to urban migration and remittances on the sending communities in Sri Lanka.

Migration emerged as a debatable global development strategy with profound opportunities and challenges for both sending and receiving destinations (Todaro, 1980). Theory of migration history starts from the Furr's remark on migration<sup>2</sup> and Revenstein's response to that; which is called "Laws of Migration" (Lee, 1966). Conceptual framework of migration can be reviewed in a broad range of studies starting from Ravanstein's Laws of migration, to the famous Todaro model, and the new economics of labour migration (De Haan, 1999). However, Lewis (1954) initiated the idea of rural urban migration using his two sector model, emphasising that the expansion of the modern sector absorbs cheap labour shifting from agriculture sector. Empirical studies show that China has made a large contribution to the literature on rural to urban migration.

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<sup>2</sup> It was a remark of Farr's to the effect that migration appeared to go on without any definite law.

This study explores the economic impact of rural to urban labour migration on sending communities paying particular attention to the determinants and usage of remittances and income gains through rural to urban labour migration in Sri Lanka.

## **Data and Methodology**

Data for this analysis comes from a distinctive structured questionnaire survey conducted by the author from January to April 2011 in Sri Lanka; comprising 377 rural to urban migrant workers drawn from non-randomly<sup>3</sup> selected 20 urban factories located in Gampaha district in Sri Lanka.

This study employs Tobit, probit and OLS regression models. Data consist with truncation problem as all the migrants do not remit. Tobit regression model is tested for identifying the determinants of internal remittances in Sri Lanka as it overcomes the nature of this type of data (censored regression)(Tobin, 1958). Further, this analysis employs probit model to examine the determinants of the purpose of remittance. Probit estimations provide the factors' influence on the decision of remittances while Tobit estimation provide simultaneous decisions of whether to remit or not, and how much to remit. The robustness of the results has been tested. OLS regression is also used to compare the coefficients.

## **Results**

Income gain is the most important motivation for both internal and international migration. This analysis attempted to calculate monthly income gains for three main groups of respondents controlling the covariates. The result shows that monthly raw income gain varies between 3000 to 13,000 rupees (Figure 1). Presumably, some of the characteristics introduced for the controls such as work experience, education are highly rewarded in the urban sector.

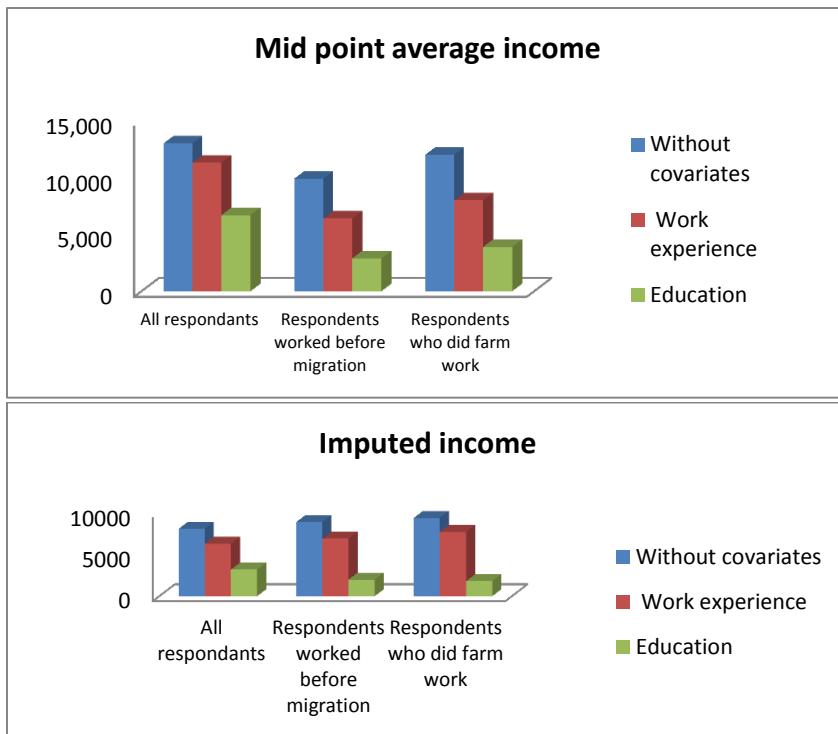
Remittance is the most tangible direct impact of migration. The results of Tobit and OLS analysis confirm that altruistic remittances depend positively on migrants' monthly income and negatively on household farm income<sup>4</sup> considering both regular and annual remittances. Further, this study identified in-kind flows as an important determinant of the annual remittances in Sri Lanka.

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<sup>3</sup> Random sampling was not possible due to the factory restrictions. Thus through the BOI contacts, the researcher was able to get approval to visit these selected factories.

<sup>4</sup> Farmland ownership has been included as a proxy for household income as income data is not much reliable.

Figure 1: Monthly income gains from rural urban migration



Source: Author Survey Data

Note: Income data has been collected as in the form of intervals. Using left and right censored point of each interval imputed income generated using STATA. Income gain has been calculated taking income difference.

The effects of rural to urban labour migration on the development of rural communities can be examined through the usage of remittances by the household of origin. This study indicated that considerable proportion - nearly one third of the remittances - go for productive investment which can generate multiplier effects in terms of income and employment. These are education and farming (Table 2).

### Conclusion and Policy Recommendations

This study explored the process of rural to urban labour migration, determinants and usage of remittances and income gains of rural urban migration in Sri Lanka. In conclusion, altruistic remittances depend positively on migrants' monthly income and

negatively on household farm income<sup>5</sup> considering both regular and annual remittances. Monthly income gain from rural to urban migration varies on average between 3000 to 13000 rupees. Migrants who shift from agriculture sector jobs are the highest income gainers. Individual income gain from the urban sector is rewarded by education and work experience compared to the rural sector. The choice of remittance depends on the purpose for which such remittance is used rather than other factors such as wage or experience.

Temporary rural-urban migration should be an integral part of the national policy analysis and planning, and should be taken more seriously into account in formulating rural development policies in Sri Lanka. Further, Sri Lanka can adopt internal migration as a development mechanism while motivating more foreign investments to provide better employment opportunities with higher wages.

As rural to urban migration brings initial capital to the poor households for starting small business, proper guidance on how to utilise remittances, mostly for productive investment with multiplier effects rather than consumptive purposes, is needed.

## References

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<sup>5</sup> Farmland ownership has been included as a proxy for household income as income data is not much reliable.

Table 1: Determinants of remittance: Tobit and OLS Results

| Determinants                 | Tobit                              |                                   | OLS                                |                                   |
|------------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|
|                              | Regular <sup>1</sup><br>remittance | Annual <sup>2</sup><br>remittance | Regular <sup>1</sup><br>remittance | Annual <sup>2</sup><br>remittance |
| Average salary               | 0.174<br>(3.95)**                  | 1.126<br>(1.99)*                  | 0.163<br>(2.49)*                   | 1.142<br>(2.00)*                  |
| Savings                      | -0.048<br>(0.75)                   | 4.022<br>(4.95)**                 | -0.034<br>(0.44)                   | 3.985<br>(2.07)*                  |
| Seettu                       | -0.049<br>(0.39)                   | 2.959<br>(1.87)                   | -0.013<br>(0.13)                   | 2.823<br>(2.01)*                  |
| Age2                         | -0.001<br>(0.38)                   | -0.032<br>(0.88)                  | -0.000<br>(0.02)                   | -0.027<br>(0.89)                  |
| Age                          | 0.081<br>(0.40)                    | 2.396<br>(0.93)                   | -0.007<br>(0.03)                   | 1.979<br>(0.97)                   |
| Gender(male =1)              | 0.511<br>(0.93)                    | 12.440<br>(1.77)                  | 0.470<br>(1.11)                    | 12.285<br>(1.78)                  |
| Education (No of years)      | -0.274<br>(2.48)*                  | 0.368<br>(0.26)                   | -0.224<br>(2.39)*                  | 0.417<br>(0.24)                   |
| Farmland ownership           | -0.313<br>(4.12)**                 | -2.538<br>(2.71)**                | -0.223<br>(3.96)**                 | -2.545<br>(2.88)**                |
| Bonus                        | 0.150<br>(4.37)**                  | 1.164<br>(2.60)**                 | 0.129<br>(1.96)                    | 1.146<br>(1.75)                   |
| No of students in the family | 1.064<br>(4.22)**                  | 2.749<br>(0.84)                   | 0.890<br>(4.00)**                  | 2.507<br>(0.86)                   |
| Experience                   | 0.089<br>(1.08)                    | 0.479<br>(0.45)                   | 0.110<br>(1.65)                    | 0.575<br>(0.50)                   |
| Marital(single=1)            | 1.497<br>(2.93)**                  | 0.521<br>(0.08)                   | 1.013<br>(2.51)*                   | -0.354<br>(0.05)                  |
| In-kind received             | -0.209<br>(1.25)                   | -4.531<br>(2.15)*                 | -0.160<br>(1.26)                   | -4.087<br>(1.98)*                 |
| Constant                     | 0.253<br>(0.08)                    | -22.667<br>(0.53)                 | 1.972<br>(0.78)                    | -16.024<br>(0.45)                 |
| Observations                 | 357                                | 357                               | 357                                | 357                               |
| R-squared                    | -                                  | -                                 | 0.23                               | 0.19                              |

\* significant at 5%; \*\* significant at 1%. Robust t statistics in parentheses.

Note : 1. Considers monthly or once in three months regular remittances in 1000 rupees  
2. Including in-kind send by the migrants, in 1000 rupees.

**Table 2: Determinants of remittances and usage of remittances in origin household  
(probit estimates)**

| Determinants              | Ever remit <sup>1</sup> | Daily expenses     | Education         | Farm work        | Housing & durable | Loan repayment    | savings          |
|---------------------------|-------------------------|--------------------|-------------------|------------------|-------------------|-------------------|------------------|
| Average salary            | 0.000<br>(0.84)         | -0.001<br>(0.31)   | 0.003<br>(1.15)   | 0.001<br>(0.37)  | 0.004<br>(1.35)   | -0.003<br>(1.37)  | -0.004<br>(1.53) |
| Total land owned          | -0.001<br>(2.04)*       | -0.027<br>(2.65)** | 0.005<br>(1.04)   | 0.016<br>(2.59)* | -0.005<br>(1.02)  | -0.009<br>(2.25)* | -0.001<br>(0.10) |
| No of migrants            | -0.004<br>(1.56)        | -0.053<br>(1.29)   | 0.004<br>(0.18)   | 0.029<br>(0.97)  | -0.032<br>(1.41)  | 0.019<br>(1.37)   | -0.050<br>(1.87) |
| No of years of schooling  | -0.003<br>(1.97)*       | -0.004<br>(0.27)   | -0.005<br>(0.57)  | -0.012<br>(1.24) | 0.019<br>(1.67)   | -0.004<br>(0.93)  | -0.005<br>(0.64) |
| Marital (single=1)        | 0.049<br>(3.72)**       | -0.171<br>(2.77)** | 0.052<br>(1.78)   | -0.009<br>(0.20) | 0.032<br>(0.93)   | 0.044<br>(1.80)   | 0.070<br>(1.94)  |
| In kind received          | 0.009<br>(1.98)*        | -0.070<br>(1.38)   | 0.058<br>(1.91)   | 0.053<br>(1.35)  | 0.013<br>(0.46)   | -0.026<br>(1.34)  | 0.053<br>(1.73)  |
| Age                       | 0.006<br>(3.78)**       | 0.005<br>(0.22)    | 0.028<br>(2.35)*  | 0.022<br>(0.96)  | 0.019<br>(0.91)   | 0.002<br>(0.26)   | -0.007<br>(0.51) |
| Age2                      | -0.000<br>(3.65)**      | -0.000<br>(0.05)   | -0.000<br>(1.92)  | -0.000<br>(1.25) | -0.000<br>(1.29)  | 0.000<br>(0.06)   | 0.000<br>(0.44)  |
| no of years of experience | -0.001<br>(2.59)**      | -0.010<br>(1.06)   | -0.008<br>(1.40)  | 0.001<br>(0.08)  | 0.010<br>(1.46)   | -0.006<br>(2.06)* | 0.002<br>(0.34)  |
| No of students of family  | 0.004<br>(1.75)         | -0.070<br>(2.11)*  | 0.077<br>(4.17)** | -0.004<br>(0.19) | -0.033<br>(1.44)  | -0.006<br>(0.72)  | 0.027<br>(1.71)  |
| Observations              | 373                     | 373                | 373               | 373              | 373               | 373               | 373              |

Robust z statistics in parentheses \* significant at 5%; \*\* significant at 1%

Note: ever remit dummy variable consider annual remittances including in-kind send by migrants, if the amount is positive the value takes 1 other wise zero.

**Nghu;j;Jf;NfaH fhy aho;g;ghzj;jpd; nghUshjhу eltbf;iffs;**  
**- xU tuyhw;Wg;ghu;it**

**fe;ijah mUe;jtuh|h**  
*tuyhw;Wj;Jiw> aho;g;ghzg; gy;fiyf;fofk;*

**gpujhd nrhw;gjq;fs;; nghUshjhur; Ruz;ly;> ahid tu;j;jfk;> Kj;Jf;Fspj;jy;>**  
*epytyp> Njhk;G*

### **mwpKfk;**

fPioj;Nja ehLfSf;F tUtjw;fhd fly;khu;f;fg; ghijapid fz;Lgpbg;gjw;fhd Kaw;rpapy; Muk;gj;jpy; ntw;wp ngw;w Nghu;j;Jf;Nfau;fs; Kjd; Kjyhf 1498,y; th];nfhlfhkhtpd; jiyikapy; ,e;jpahtpd; fs;spf;Nfhl;ilapid te;jile;jdu;. njhlu;e;J Nfhthtpidj; jq;fsJ fPioj;Nja Mjpf;f eltbf;iffSf;Fj; jiyikafkhf khw;wpf;nfhz;l mtu;fs; mjw;fhd eltbf;iffspYk; jq;fis <LgLj;jpf;nfhz;ldu;. ,jd; xU fl;lkhfNt 1505,y; ,yq;ifapd; fiuNahuq;fspy; vjpu;ghuhjtjkhf fhyb gjpj;j Nghu;j;Jf;Nfau;fs;; njhlu;e;J 1658tiu mg;gFjpfspy; mtu;fsJ nry;thf;fpid epiyehl;bf;nfhz;ldu;. mtu;fs;; ,yq;if te;j fhyg;gFjpapy; ,yq;ifahdJ %d;W ngUk; gpupTfshff; Nfhl;il> fz;b> aho;g;ghzk; vdg; gpupf;fg;gl;Lf; fhzg;gl;Ild; ,tw;Wf;fpilapNy Kuz;ghLfSk; jiypupj;jhbf;nfhz;bUe;jd. vdNtjhd; Nghu;j;Jf;Nfau;fspd; eltbf;iffs; ,yq;ifapy; tpupTgLj;jg;gl;likf;F ntWkNd nghUshjhу kw;Wk; kjk; gug;Gfpd;w fhuzpfs; kl;Lkd;wp murpay; rhu;e;j fhuzpfSk;; VuhskhfNt epiwe;jpUe;jd vdf; \$Wfpd;whu; nr. fpU;zuh|h. (fpU;zuh|h>nr>2000>130) vt;thwhapDk; ,yq;ifapd; .j;jifa Fog;gkhд murpay; epiyapidj;; jq;fsJ Mjpf;f tp];jupg;Gf;Fr; rhjfkhd Kiwapy; gad;gLj;jpf;nfhz;l Nghu;j;Jf;Nfau;fs; gbg;gbahf ,yq;ifapd; fiuNahuq;fisf; ifg;gw;wp ,Wjpahf aho;g;ghzj;jpidAk; 1619,y; jq;fsJ fl;Lg;ghl;bd; fPo; nfhz;L te;jdu;;

Nghu;j;Jf;Nfau;fs; aho;g;ghzk; te;j rkaj;jpy; aho;g;ghz murhdJ ,yq;ifapd; tlgFjpapy; jkpo; kd;du;fspd; Mjpf;f;jpd;fPo; mijpfsthd jkpou;fis cs;thq;fpa epiyapy; irtkuGfSld; ,ize;j.tifapNy nry;thf;Fg; ngw;Wf; fhzg;gl;IJ. ,J aho;g;ghzf;FlhehL> mayapy; fhzg;gl;l JPTfs;> kd;du; njhlf;fk; Ky;iyj;jPT tiuapyhd gFjpfs; Mfpaw;wpid cs;slf;fpajhff; fhzg;gl;Injd;gJ Nghu;j;Jf;Nfau;fsJ Ml;rpf;fhyj;jpd; ,Wjpapy; ,yq;ifapy; kjFUthfg; gzpahw;wpa FitNwh]; Rthkpfspd; fUj;jhf cs;sJ (*Queyroz Fernao De, 1930,51*). nghJthf Nghu;j;Jf;Nfau;fs; aho;g;ghz murpid KOikahff; ifg;gw;wpf;nfh;Sk;tiu ,yq;ifapd; tlf;F> fpof;F> tlNkw;Fg; gpuNjrq;fs; ahTk; aho;g;ghz muru;fspd; fl;Lg;ghl;bd; fPNoNa fhzg;gl;L te;jd. 13Mk; E}w;whz;bd; gpd;djhf ,e;j murhdJ mjp cd;djkhd epiyapidAk; mjpjhuj;jpidAk; ngw;wpUe;jld; Vida rpw;wuRfsplkpUe;J jpiwapidg; ngw;Wf; nfh;fpd;w epiyapYk; fhzg;gl;IJ.

mj;Jld; mf;fhyg;gFjpay; aho;g;ghz ,ahr;rpaj;jpid MI;rp nra;j muru;fis  
 Mupar;rf;futu;j;jpfs; vd;w ngau;fspy; mioj;Jf;nfhs;sg;gl;likAk; Nehf;fj;jf;fJ.  
 Nghu;j;Jf;Nfau;fs; ,yq;if te;j fhyg;gFjpapy; aho;g;ghz ,ahr;rpakhdJ Rje;jpuKk;  
 jd;dhjpf;fkK; nfhz;l murhff; fhzg;gl;Jld;; ey;Y}upidj; jdJ jiyeufukhff;nfhz;L  
 tptrhaj;jpidAk; kPdtj;njhopyAk; jq;fsJ gFjpapd; gpujhd tUtha; %yq;fshfg;  
 ngw;wpUe;jJ. ,jidtpl kd;dhUf;Fk; jpUNfhzkiyf;FkpilapNy 18 Fwpr;rpfisf; nfhz;l  
 gFjpahdJ td;dpau;fshy; MI;rp nra;ag;gl;L te;jikAk; ,q;F Fwpg;gplj;jf;fJ. ,jd;  
 MI;rpahsu;fs;; jd;dhjpf;fk; ngw;w Rje;jpu MI;rpahsu;fshf aho;g;ghz murpd;  
 fl;Lg;ghLfspypUe;J tpyfpa tifapy; jq;fsJ MI;rp eltbl;iffis Nkw;nfhz;L te;jdnud;gJk;  
 mtjhdpf;fj;jf;fJ.

1619,y; Kw;WKOjhf aho;g;ghz;jpidj; jq;fs; trkhf;fpf;nfhz;l Nghu;j;Jf;Nfau;fs;  
 aho;g;ghz;jpy;; tzpfj;Jld; kjk; gug;Gfpd;w Kaw;rpfspYk; jq;fis <LgLj;jpf;nfhz;L  
 mtw;wpy; ntw;wpAk; fz;ldu;. ,jw;F aho;g;ghz murpd; gytPdKk; aho;g;ghz;jpy;  
 tho;e;Jnfhz;bUe;j mf;fhy r%fj;jpd; eltbl;iffSk; Nghu;j;Jf;Nfau;fSf;F ,jw;fhd  
 re;ju;g;gi;jpid Vw;gLj;jpf;nfhLj;jJ. Vida INuhg;gpau;fisg; NgyhNt ,tu;fSk;  
 FbNaw;wehLfspd; tsq;fis Kw;WKOjhfr; Ruz;Lfpd;w Kaw;rpapy; aho;g;ghz;jpy;  
 kl;Lkd;wp ,yq;if KOtpjYNk <Lgl;ldu;. jq;fspd; nghUshjhhu eltbl;ifapd; xU ghfkhf  
 ,yq;ifapd; njd;gFjpapy; fWth tu;j;jf;jpy; mjpfsthd <Lghl;bidf; fhl;ba  
 Nghu;j;Jf;Nfau;fs; gpw;gl;l fhyq;fspy; jkpou;fs; mjpfstpy; tho;e;j ,yq;ifapd;  
 tlgFjpahd aho;g;ghz;jpy; epytupKiwapid tpupTgLj;jpAk; ahidtu;j;jfk; kw;Wk;  
 Kj;Jf;Fspj;jy;> Nghd;wtw;wpYk; rpy tifahd tptrthag; nghUl;fspd; cw;gj;jpapYk;  
 mtw;wpd; Vw;Wkjp ,wf;Fkjp njhlu;ghd tu;j;jf Kaw;rpfspYk; ,wq;fpajd; %ykhfg;  
 ngUkstpyhd ,yhgj;jpidg; ngw;Wf;nfhz;ldu; (gi;kehjd;>rp>2001>49). jq;fsJ  
 tUthapidg; ngUf;Ftjid ,yf;fhf Nkw;nfhz;bUe;j ,tu;fs; kf;fspd;kPJ gytpjkhd tupfis  
 tpjpj;jdu;.

Nghu;j;Jf;Nfau;fsJ murpay; epu;thfr;nraw;ghLfSk; mtu;fsJ nghUshjhhu eltbl;iffSk;  
 ,yq;ifapy; xd;WIndhd;W njhlu;Ggl;l tifapNyjhd; mike;jpUe;jd. 1543,y;  
 Nghu;j;Jf;Nfau;fspd; aho;g;ghz;jpd; kPjhd KjyhtJ Neubj; njhlu;GfSk; 1560,d;  
 gpd;ghf aho;g;ghz;juru;fsplkpUe;J jpiw ngw;Wf;nfhz;l epfo;TfSk; 1561,y;  
 kd;dhupy; Nfhl;ilnahd;wpid mikj;Jf;nfhz;Jld; %ykhf mg;gFjpfsy; jq;fsJ  
 Nkyhz;ikapid epiyepWj;jpf;nfhz;l rk;gtq;fSk; aho;g;ghz ,ahr;rpaj;Jf;Ff; fpilj;Jte;j  
 tUkhdj;jpid Kf;fpakhfg; ghjpj;j epfo;Tfshff; fhzg;gl;ld. ,jdhy; Fwpg;ghf  
 aho;g;ghz;juru;fSf;F mJtiu fhyKk; fpilj;Jte;j tUthapy; ghupanjhU tPo;r;rpNaw;gl;IJ  
 (fpU;zuh/h>nr>2000>130). NkYk; aho;g;ghz; jpypUe;J ngwg;gl;l tUthapd;  
 %ykhfNt mtu;fsJ mur ,ae;jpukhdJ ,yq;ifapy; ngUtsu;r;rp fz;lnjdyhk;. gilapdu;fs;>  
 epu;thfg;gzpahsu;fs; kw;Wk; \$ypg;gilapdUf;Fk; aho;g;ghz;jpypUe;J ngwg;gl;l  
 tUthapy; rk;gsk; nhLf;fg;gl;IJ. NkYk; Nfhl;ilfs; fl;Ltjw;Fk; kJg;gug;Gr;  
 nraw;ghLfSf;Fk; aho;g;ghz;jpypUe;J fpilj;j tUthapy; ngUk; gq;F  
 gad;gLj;jg;gl;lnjdyhk;. vt;thwhapDk; aho;g;ghz;jpd; nghUshjhuj;jpidj; jpl;lkpl;L  
 Ruz;Lfpd;w ,yf;Ff;nfhz;ltu;fshff; fhzg;gl;l Nghu;j;Jf;Nfau;fsJ nraw;ghLfspdhy;

aho;g;ghzj;jpd; nghUshjhuk; kl;Lkd;wp KO ,yq;ifapd; nghUshjhukk; ghjpf;fg;gl;lik Fwpg;gplj;jf;fJ.

### **Nehf;fq;fs;**

aho;g;ghzj;jpy; Nghu;j;Jf;Nfau;fhy nghUshjhuh eltbfi;iffs; aho;g;ghzj;juru;fhy nghUshjhuh eltbfi;iffs;spypUe;J gy tplaq;fsp; NtWgl;Lk; rpy mk;rq;fsp; xw;Wikg;gl;l epiyapYk; fhzg;gLfpd;wd. Vw;fdNt eilKiwapypUe;j rpy nghUshjhuh xOq;FKiwAld; Gjpa rpy Gjpa nghUshjhuh xOq;FKiwfisAk; mtu;fs; GFj;jpdu;. ,t;thW jq;fsJ Gjpa rpy nghUshjhuh xOq;FKiwisg; GFj;Jfpd;w re;ju;g;gj;jpy; aho;g;ghzj; jkpo; kf;fsJ nghUshjhuh r%f epiyapy; Vw;gl;l khw;wq;fs;> mtu;fs; vjpu;nfhz;l rthy;fs;> Nghu;j;Jf;Nfau;fsJ guktpNuhjpfshfTk; jkpo;NgRfpd;w ,d;ndhU gputpdu;fshfTk; mf;fhg;gFjpapy; aho;g;ghzj;jpy; tho;e;J te;j ,];yhkpa kf;fs; vjpu;Nehf;fpa neUf;fbfs; Nghd;w gy tplaq;fis ,t; Ma;T ntspg;gLj;Jfpd;wJ. NkYk; ,e;j Ma;thdJ Nghu;j;Jf; Nfau;fhy ,j;jifa aho;g;ghzj;jpd; nghUshjhuh eltbfi;iffs xOq;FgLj;jp mtw;wpid Mtzg;gLj;Jfpd;w tifapy; mike;Js;sJ. mj;Jld; ,g;gFjpapidg; gw;wpajhf tpupthd Ma;Tfs; vitAk; Nkw;nfhhs;sg;gltpy;iynad;gJk; Fwpg;gplj;jf;fJ.

### **Ma;TKiwapay;**

Ma;tpd; mZFKiwahdJ nghUshjhuh kw;Wk; tuyhw;W mbg;gilapy; mike;Js;sJ. mjhtJ ,t;tha;Tf; fl;Liuapy; Kjy;ju kw;Wk; ,uz;lhe;jur; rhd;Wfs; tuyhw kw;Wk; nghUshjhuh mZFKiwapd; mbg;gilapy; gad;gLj;jg;gl;Ls;sd. Nghu;j;Jf;Nfau;fhy Mtzq;fs;> aho;g;ghzj;juru;fhy ,yf;fpaq;fs;> Nghu;j;Jf;Nfa FUkhu;fspd; gilg;Gf;fs;> Nghd;wd gputjhd Kjy;jur; rhd;Wfshf cs;sd. Nghu;j;Jf;Nfa Mtzq;fisAk; gpw Mjhuq;fisAk; mbg;gilahf itj;Jg; gpw;gl;l fhyq;fsp; vOjg;gl;l ,yf;fpaq;fs;> Ma;Tf; fl;Liufs;> ,izaj;jpypUe;J ngwg;gl;l rhd;Wfs; Nghd;wit ,uz;lhe;jur; rhd;Wfshf mikfpd;wd. NkYk; ,j;Jiwapy; <LghLghL nfhz;l mwpQu;fs;> Muha;r;rpahsu;fs; Nghd;wtu;fsplkpUe;J gy;NtW jfty;fs; ngwg;gl;L ,f;fl;Liuf;Fg; gad;gLj;jg;gl;Ls;sd.

### **RUf;fKk; KbTk;**

,yq;ifapd; tlgFjpahd aho;g;ghzj;jpy; fhzg;gl;l murpay; Fog;gepiyapidj; jq;fSf;Fr; rhjkhd tifapy; gad;gLj;jp mg;gFjpfsj; jq;fsJ KOikahd fl;Lg;ghl;bd;fPo; nfhz;L te;jjd; %ykhf kjk; gug;Gjy; kw;Wk; tu;j;jf eltbfi;iffs;py; jdpAupik ngw;Wf;;nfhz;IJ kl;Lkd;wp jq;fspd; tUthapid vt;thwhd Kaw;rpfis Nkw;nfhz;Lk; ngUf;f vz;zpdu;. Nghu;j;Jf;Nfau;fs; ,yq;if te;j Muk;g fhyq;fsp; ehl;bd; Vida gFjpfs; py; mtu;fs; mf;fiwapid; fhl;ba msTf;F aho;g;ghzj;jpy; fhl;ltpy;iy. mtu;fsJ njhl;Gfs; aho;g;ghzj;Jld; ,Ue;jNj jtpu ePz;lfhyj;jpw;Fg; gpd;duhfNt mtu;fs; aho;g;ghzj;jpidj;

jq;fsJ fl;Lg;ghl;bd; fPo; nfhz;L te;jdu;. mtu;fs; ,yq;ifapd; gpw gFjpfspy; Nkw;nfhz;L te;j nghUshjhu eltb;f;ifapid xj;jtifapy; aho;g;ghzj;jpYk; Ruz;lypd; mbg;gilapy; Nkw;nfhz;L te;jhYk; mtu;fsJ nghUshjhu eltb;f;ifapid; %ykhf aho;g;ghzj;jpid mtu;fsJ KOikahd fl;Lg;ghl;bd; fPo; nfhz;L tutpy;iynad;gJ Fwpg;gplj;jf;fJ. mNjNeuj;jpy; mtu;fsJ Gjpa nghUshjhu xOq;FKiwfSf;Fk; aho;g;ghzj;jtu;fs; ngUksTf;F cs;thq;fg;gltpy;iynad;gJk; Nehf;fj;jf;fJ. ,];yhkpau;fs; jq;fSila ghuk;gupaj; njhopyhd tpaighu eltb;f;ifpis ,oe;j epiyapy; aho;g;ghzj;jpidtpl;L tpyfp xJq;fptho Ntz;ba #oiyg; Nghu;j;Jf;Nfau;fs; Vw;gLj;jpf; nfhLj;jdu;.

### **Ma;Tf;F cjtptait**

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fpU];zuh[h>nr. (2000) ,yq;if tuyhW> ghfk;.02> (aho;g;ghzk;: gpiwepyh ntspaPL).

gj;kehjd;> rp.(2001)> ,yq;ifj; jkpou; NjrtoikfSk; r%ftoikfSk;> (nfhOk;G: Fkud; Gj;jf ,y;yk;).

## The Impact of Conflict on Households' Livelihoods

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**Key words:** *Conflict, ethnic groups, livelihoods, strategies.*

### Introduction

The ethnic conflict in Sri Lanka represented a major threat to the livelihoods of all people in the country and especially those in the conflict zones (Korf 2004; Nigel 2010; Kulatunga & Lakshman 2010). The rise of Sri Lanka's ethnic conflict and its impact at macro-level has been well documented (de Silva 1998; Abeyratne 2004). However, studies at micro-level which primarily focus on the nexus between ethnic conflict and households' livelihoods in the war zones in Sri Lanka are rare. None of the existing studies has fully captured the availability and accessibility of physical, social, cultural, economic, political, and institutional factors and agency in the context of conflict that largely determine the livelihood options of the households in 'ethnically bordered agricultural villages'. Furthermore, there is little information available on the dynamics of the livelihood strategies covering the pre-, during, and post-conflict periods. In this research an attempt is made to understand the complex nature of the socio-political and economic interactions of households of different ethnic groups, based on fieldwork in six 'ethnically bordered agricultural villages' in conflict zones of Ampara District in Eastern Sri Lanka.

### Objectives

The major aim of this study is to contribute to a better understanding of the households' access to livelihood assets, causes and dynamics of livelihood activities and strategies of households in different ethnic groups by mainly focusing on the different opportunities and constraints faced by the households when carrying on their livelihoods in the conflict environment. The study also aims to contribute to the theoretical discussion on livelihood studies in the context of conflict. It is intended to achieve this through addressing the following research questions: (i) how do different households access and make use of assets? (ii) what are the impacts of conflict on households' livelihood activities? (iii) what type of livelihood strategies are formulated by different households in situations of conflict? and (iv) how can the dynamics of livelihoods in a conflict setting be incorporated into sustainable livelihood framework?

## **Methodology**

To cover the plurality of voices that can emerge in the process of understanding the complexity of livelihoods in a conflict context, this study used a mix of qualitative and quantitative data collection. Information gathering methodologies included unstructured dialogues, interviews with key state and non-state stakeholders, collection of information from texts and official records, group discussions, in-depth interviews with households, observations and a survey. Considering the significance of the impact of conflict on different ethnic groups, the selection of the study area was done to represent different ethnic groups and the degree to which conflict had affected them. Fieldwork was conducted on three separate occasions between late 2007 and early 2010. The gathered information has been organised using a modified livelihoods framework enable capturing the complex nature of the impact of conflict on households' livelihoods at the micro-level.

## **Results**

The impact of the conflict on access to livelihood assets and activities varied according to households' ethnic group, socio-economic status, location of residence, relations with political and military power holders, and relationships with people living in non-conflict zones in both Sri Lanka and abroad. The conflict situation forced many people from all three ethnic groups to abandon their traditional resources and livelihood activities in order to search for alternative forms. Although most of the households were losers in the conflict, there were a few winners, even at the micro level.

The research revealed that various livelihood strategies were used by households classified as survival, coping, and adaptation. Most of the livelihood strategies adopted by people in all six locations studied are mainly context based. Several strategies were common to the households of all three ethnic groups or at least to two of them. Certain strategies were selected predominantly by one group of people who shared the same ethnic identity. Further, the reasons behind using certain strategies differed according to people's socio-economic status and their political affiliations. The livelihood framework adopted in the study enabled to explore the influences of conflict that had shaped the major livelihood components at the local level.

## **Conclusion**

The issues examined in this study are providing useful information and knowledge to set policies or design strategies for the future development of the livelihoods of conflict-affected people. The findings demonstrate that households' livelihoods were inextricably linked with the conflict. The different elements of households' livelihoods

of different ethnic groups in all six locations studied were affected both directly and indirectly through the conflict's impact on livelihood entitlement, people's lives, and in the creation of new forms of social inequality. Conversely, there was clear evidence that the livelihood changes which households made in the context of conflict were a cause of further conflict. The modified livelihoods framework used here allows for incorporating households of different ethnic groups and different segments of households in the same ethnic groups as central in the inquiry into the livelihood approach.

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**Aj;jj;jpw;Fg; gpd;duhd fpuhkpa mgptpUj;jpia Vw;gLj;JtjpYs;s jilfSk;>  
Kd;Ndw;Wtjw;fhd cj;jpfSk;  
(mk;ghiw khtl;l fiuNahu fpuhkq;fspid ikag;gLj;jpa Ma;T)**

**Nf.vk;.vk; gyPy; `f; kw;Wk; A.vy; . wprhdh  
nghUspaw;Jiw>,yq;if njd;fpof;F gy;fiyf;fofk;**

**gpujhd nrhw;gjq;fs;: fpuhkpa mgptpUj;jp> mgptpUj;jpf; Fwpfhl;bfs;> kf;fs;  
gq;Nfw;G**

### **mwpKfk;**

jw;fhy mgptpUj;jpr; rpe;jidfspYk; nghUshjhu ,yf;FfspYk; “fpuhkpa mgptpUj;jp”  
Kf;fpa ikag;nghUshf milahsk; fhzg;gl;Ls;sJ. Vnddp; tsh;r;rpaile;J tUfpd;w  
ehLfspy; 70% Nkw;gl;l kf;fs; fpuhkq;fspNyNa tho;e;JtUtJld; 80% Nkw;gl;l  
kf;fs; tWikf; Nfhl;bw;F fPNoAk; tho;e;J tUfpd;wikahFk;. fpuhkq;fis mgptpUj;jp  
nra;tjD}lhf gpuhe;jpauPjpahtTk;> NjrpauPjpahtTk; r%f> nghUshjhu  
mgptpUj;jpia milaNtz;Lk; vd;w fUj;J gutyhf;fg;gl;L tUfpd;wJ. ,jw;fika rkfhy  
mgptpUj;jpg; gz;Gfspy; fpuhkpa mgptpUj;jp Kf;fpa ,yf;fhf milahsk; fhzg;gl;L  
nrad;Kiwg;gLj;jg;gLfpd;wJ.

fpuhkpa mgptpUj;jp vd;gJ fpilf;Fk; kdpj> ngsjPf %ytsq;fspid cr;rkl;l;j;jpw;Fg;  
gad;gLj;jp fpuhkpa nraw;wpwidf; \$l;LtJk;> twpa fpuhkthrpfspd;  
tho;ifj;juj;ijAk;> tUkhd kl;l;j;pidAk; mjpfupf;fr; nra;tjidAk;> mgptpUj;jpr;  
nraw;ghl;by; mth;fspd; G+uzkhd qq;fspg;gid ngw;Wf;nfhs;tjidAk; ,Wjp  
,yl;rpaq;fshff;nfhz;l nfhs;iffisAk;> jpl;lq;fisAk; cUthf;Fjy; vd  
tiutpyf;fzg;gLj;jg;gLfpd;wJ (njd;dNfhd;:2003).  
fpuhk kf;fspd; fy;tp> Rfhjhuk;> Nghrhf;F> cl;fl;likg;G trjpf; > Ntiytha;g;G  
Nghd;wtw;wpid mgptpUj;jp nra;tjid fpuhkpa mgptpUj;jp Fwpf;fpd;wJ. mk;ghiw  
khtl;lkhdJ %tpd kf;fisAk; cs;slf;fpa khtl;lkFk;. 1980fspw;F gpd;du; ,lk;ngw;w  
cs;ehl;L Aj;jkhdJ %tpd kf;fspilNaahd cwtpid rPu;Fiyj;J mgptpUj;jpia  
gpd;js;spaJ. Aj;jk; KbTf;Ff; nfhz;Ltug;gl;ljd; gpd;du; mk;ghiw khtl;l;j;ypy;  
gy;NtW mgptpUj;jp; jpl;lq;fs; eilKiwg;gLj;jg;gl;L tUfpd;wd. ,t;tha;thdJ mk;ghiw  
khtl;l fiuNahu fpuhkq;fshd fhiujPT> epe;jT+u;> ml;lhiser;Nrid> MiyabNtk;G>  
jpUf;Nfhapy;> nghj;Jtpy; Mfpa gpuNjr nrayf gpuptpw;Fl;gl;l fpuhkq;fspid  
mbg;gilahff;nfhz;L Kd;ndLf;fg;gLfpd;wJ.

mk;ghiw kht;l fiuNahuf;fpuhkq;fs; ngsjPf> kdpj tsq;fs; epiwe;j gpuNjrkff; fhzg;gl;l NghjpYk; mit Vd; ,d;Dk; mgptpUj;jpia milatpy;iy mjid vt;thW mile;J nfhs;syhk; vd;gdtw;wpid Ma;Tg; gpur;rpidahff;nfhz;L ,t;tha;T Kd;ndLf;fg;gl;Ls;sJ.

### **Ma;tpd; Nehf;fq;fs;**

,t;tha;tpd; gpujhd Nehf;fk; mk;ghiw kht;l fiuNahuf; fpuhkq;fspd; mgptpUj;jp epiyapid fy;tp> Rfhjhuk;> tUkhdk;> Nrkpg;G> cl;fl;likg;G trjpf; Mfpa Fwpfhl;bfs; %yk; kjpg;gpLtjhFk;. mq;F Nkw;nfhs;sg;gl;l mgptpUj;jp eltb;iffspid kjpg;gpLjy;> mgptpUj;jpia Vw;gLj;JtjpYs;s jilfspid ,dq;fhZjy;> mr;rthy;fspid ntw;wpnfhs;tjw;fhd je;jpNuhghaq;fspid ,dq;fhZjy; Mfpa Jiz Nehf;fq;fspD}lhf ,e;Nehf;fk; milag;gl;Ls;sJ.

### **Ma;TEI;gKiwfs;**

,t;tha;tpw;Fupa jfty;fs; Kjyhk;> ,uz;lhk; %yfq;fspypUe;J Nrfupf;fg;gl;bUf;fpd;wd. ,jw;fika ,t;tha;tpd; Kjy;epiy juTfshdJ Neh;fhzy;> Neub mtjhdk;> fsg;gq;Fgw;wy;> tpdhf; nfjh;J Nghd;wtw;wpd; %yk; ngw;Wf; nfhs;sg;gl;bUf;fpd;wj. ,jpy; 100 tpdhf;nfjh;Jf;fs; Ma;Tg; gpuNjr fpuhk kf;fsplk; nfhLf;fg;gl;Lk; fpuhk mgptpUj;jp cj;jpNahfj;ju;fs;> fpuhk kf;fs;> fpuhk Nrtfu;fs; MfpNahuplk; Neu;fhzy;fs; %yKk; juTfs; Nrfupf;fg;gl;ld.

,t;tha;tpw;fhd ,uz;lhk;epiy jutfshdJ> mur jpif;fsq;fspdhy; gpuRupf;fg;gl;l Gs;sptpgu mwpf;iffs;> rQ;rpiffs;> mk;ghiw kht;l nrayfj;jpdhy; jpul;lg;gLk; kht;l Gs;sptpguj; jpul;Lf;fs;> ,izaj;jsk; kw;Wk; Vida ,yj;jpudpay; Clfq;fs; %ykhfTk; ngwg;gl;bUf;fpd;wd. ngwg;gl;l jfty;fs; gFg;gha;T nra;ag;gl;L KbTfs; ngwg;gl;Ls;sd.

### **Ma;tpd; KbT**

,t;tha;Tg; gpuNjrj;jpy;; r%f mgptpUj;jp Fwpfhl;bfshd fy;tp> Rfhjhuk; Nghd;wd jpUg;jpahf ,Ue;jNghjpYk; gpuNjrj;jpd; nghUshjhu Fwpfhl;bfshd tUkhdk;> Nrkpg;G> %yjdthf;fk;> Nghd;wd fPo;kl;l;jpy; ,Ug;gJ ,dq;fhzg;gl;Ls;sJ. ,f;puhkq;fspy; gy mgptpUj;jpj; jpl;lq;fs; eilKiwg;gLj;jg;gl;lNghjpYk; fpuhkq;fspy; mgptpUj;jpia Vw;gLj;Jtjpy; murpay; jiyaPL> murpay; ghugl;rk;> Coy;> kf;fspd; gq;Fgw;wypd;ik> rdj;njhif tsu;r;rp> rPjdk;> Nghijg;nghUs; ghtid

Nghd;w r%fg; gpur;rpids; > fle;jfhy Aj;jKk; mjd; tpisTfSk; > Ntiyapd;ik > tWik Mfpas fhuzpfSk; jilfshf ,dq;fhzg;gl;Ls;sd.

ml;ltiz – 01: njupT nra;ag;gl;l rpy mgptpUj;jpf;fhd jilfs;

| ,y | fpuhkq;fspd; mgptpUj;jpf;Fj; jilahdit                | rjtPjk; |
|----|--|---------|
| 01 | tWik   | 90      |
| 02 | tPlikg;G trjpfs;ik                                   | 68      |
| 03 | Rfhjhu trjpapd;ik                                    | 60      |
| 04 | Nghf;Ftuj;J trjpapd;ik                               | 52      |
| 05 | fle;jfhy Aj;jKk; mjd; tpisTfSk;                      | 82      |
| 06 | fw;wy; trjpfs; Fiwt                                  | 38      |
| 07 | Ntiyapd;ik   | 88      |
| 08 | rPjdk;> Nghijg;nghUs; ghtid Nghd;w r%fg; gpur;rpids; | 92      |
| 09 | murpay; ghugl;rk;                                    | 90      |

(%yk;: fs Ma;T- 2011)

Ma;Tf; fpuhkq;fspd; fy;tp epiyia Nehf;Fkplj;J Kd;gs;spf; fpilg;gdT kpjf;jpUg;jpahfTk; ,uz;lhk;epiy ghlriyfspd; fpilg;gdT XusT jpUg;jpahfTk; fhzg;gLfdp;w mNjNtis %d;whk;epiy ghlriyfs; > cau;fy;tp epWtdq;fspd; fpilg;gdT gpd;jq;fpa epiyapYs;sd. NkYk; ,f;fpuhkq;fspy; Muk;gf;fy;tp fw;wtu;fs; mijpfkhf ,Uf;fpd;w mNjNeuk; 2k;> 3k; epiy fy;tp fw;wtu;fs; Muk;gf;fy;tp fw;wtu;fspYk; FiwtfNt cs;sdu;. ,jw;F gpujhd fhuzk; rpWtu;fs; njhopy; epkpu;j;jk; ghlriyfspy;ue;J ,iltfy; ,f;fpuhkq;fspy; mijpfkhf fhzg;gLfdp;wikahFk;. NkYk; ,f;fpuhkq;fspy; cau;fy;tp fw;Nwhu;fspd; njhif 10 tPjj;jpw;Fk; FiwtfTs;sik Fwpg;gplj;jf;jhFk;.

,g;gpuNjr Rfhjhuepiyapid Nehf;fpdhy; Ma;Tg;gpuNjr fpuhkq;fspYs;s kf;fs; midtUf;Fk; rpWtu;fs; > ngz;fs; (fu;gpzpf; > tsu;e;Njh;fs; > KjpNahu; Nghd;wtu;fS;fhd rpfpr;irfs; jpUg;jpahd Kiwapy; fpilf;fpd;wJ. NkYk; Rfhjhu itj;jpajpfhup fhupahyaj;jpd; njhopw;ghLfshd nlq;F xopg;G Ntiyj;jpl;lk;> NghypNah kUe;Njw;wy;> jLg;G+rp Vw;wy;> fu;gpzpj;jha;khu; guhkupg;G Nghd;w njhopw;ghLfs; jpUg;jpahd Kiwapy; fpilf;fpd;w mNjNtis mf;fpuhk kf;fs; kj;jpapyhd Rfhjhu tpopg;Gzu;Tfs; gpd;jq;fpaepiyapy; fhzg;gLfdp;wJ. Fwpg;ghf ,r;Nrifsp; rpy Ma;Tg;gpuNjr;jpYs;s Ff;fpuhkq;fs; kw;Wk; vy;iy fpuhkq;fspYk; FiwtfNt fpilf;fpd;wd. nghUshjhuepiyia Nehf;Fkplj;J ngUk;ghYk; kf;fs; tptrhaj;jpidNa IPtNdhghaj; njhopyhff; nfhz;Ls;sdu;. kw;Wk; mf;fpuhkkf;fs; kPd;gpb> rpWif;jnjhopy;fs; Nghd;w njhopy;fisAk; Nkw;nfhs;fpd;wdu;. vdpDk; ,k;kf;fspd; tUkhdkhdJ mtu;fsJ tho;f;ifiaf;nfhz;L

elhj;Jtjw;F NghJkhdjhf ,y;iy. ,jdhy; mtu;fshy; jq;fsJ tho;thjhuj;jpid Nkk;gLj;jpf;nfhs;s Kbatpy;iy. NkYk; mtu;fspy; mjpfkhdts;fs; rKu;j;jp cjtpngWfpd;wtu;fshfTk; tWlk Nfhl;bYk; fhzg;gLfpd;wdu;;

**ml;ltiz – 02: rKhj;jpj; jpl;lj;jpd; fPo; ed;ik ngWNthH tpguk; - 2010**

| .y | gpuNjr nrayfg;<br>gpupT | nkhj;jf;<br>FLk;gq;f<br>s; | Kj;jpiuapd; ngWkj (‐gh‐) |          |         |         |         |         |          | rKh;j;jp<br>ngWNth<br>h; |
|----|-------------------------|----------------------------|--------------------------|----------|---------|---------|---------|---------|----------|--------------------------|
|    |                         |                            | 61<br>5                  | 415      | 37<br>5 | 35<br>0 | 25<br>0 | 21<br>0 | 155      |                          |
| 01 | fhiujPT                 | 5179                       |                          | 205<br>3 |         |         |         |         | 759      | 2812                     |
| 02 | epe;jT+H                | 8173                       |                          | 209<br>3 |         |         |         |         | 934      | 3827                     |
| 03 | ml;lhisr;Nrid           | 10902                      |                          | 435<br>9 |         |         |         |         | 145<br>2 | 5811                     |
| 04 | MiyabNtk;G              | 6843                       |                          | 307<br>9 |         |         |         |         | 950      | 4173                     |
| 05 | jpUf;Nfhtpy;            | 8621                       | 02                       | 364<br>2 |         | 01      |         |         | 120<br>3 | 4848                     |
| 06 | nghj;Jtpy;              | 9680                       | 02                       | 449<br>1 |         |         |         |         | 131<br>5 | 5808                     |

(%yk;; mk;ghiw khtl;l Gs;sp tpguj;jpul;L- 2010)

Ma;Tg;gpuNjr fpuhkq;fspy;> fpuhkj;jpid mgptpUj;jp nra;af;\$ba jpl;lq;fs; gy Kd;ndLf;fg;gLfpd;wd. ,j;jifa jpl;lq;fs; muR> muRrhuh epWtdq;fs; kw;Wk; ntspohl;L cjtpfspdhy; Kd;ndLf;fg;gLfpd;wd. ,jpy; murpdhy; eilKiwg;gLj;jg;gLfpd;w k`pe;j rpe;jid Ntiyj;jpl;lj;jpd; fPohd fkneFk jpl;lk; gw;wpa mwpthdJ fpuhkkf;fspd; ngUe;njhifapdu; kj;jpapypy;iy. mj;jpl;lk; gw;wpAk; mjd; gyhgyd;fs; gw;wpAk; mtu;fs; mwpatpy;iy. vdpDk; fpuhkq;fs; kj;jpapy; fkneFkjpl;lk; gutyhf;fg;gl;L mf;fpuhkq;fs; kpd;rhuk;> fpuhkpa Ntiytha;g;G> FbePu; trjp> cl;fl;likg;G trjp> ghlriy mgptpUj;jp> Rfhjh epiyaq;fs;> [dnrtd tPlikg;Gj;jpl;lk;> ePu;ghrdj;jpl;lk; Nghd;w gyhgyd;fspid ngw;wpUf;fpd;wJ vdpDk; nghJ;jnhiyNgrp Nritapd; gutyhf;fk; FiwrhftNt fhzg;gLfpd;wJ.

**tpje;Jiufs;**

Ma;Tg;gpuNjr fpuhkq;fspd; mgptpUj;jpf;fhf gpd;tUk; tpje;JiufSk; Kd;itf;fg;gLfpd;wd. fpuhkq;fspd; fy;tp mgptpUj;jpf;fhf ghlrhiyfs; rfy trjpfisAk; nfhz;ljhTk; fhij;jpd; Njitf;Nfw;w njhopEl;gpwit toq;ff;\$batifapYk; khztu;fspd; fy;tpahu;tj;jpidf; \$l;Lk;tpjj;jpYk; mikf;fg;gLjy;> khztu;fspd; ,iltpyfy;fis Fiwj;jy;> njhopw;gapw;rpa pid toq;ff;\$ba fpuhkpa njhopw;gapw;rp epiyak;> njhopEl;gf;fy;Y}upfspy; Ranjhopy; tha;g;Gf;fSs;s gapw;rpnewpfs; toq;Fjy;> Mrpupau;fSf;Fk; khztu;fSf;Fk; ,ilapyhd ,ilntspapidf; Fiwj;jy;> Kiwrhuf; fy;tpj;jpl;lj;jpid tp];upj;jy;> fy;tpuPjpa hd rthy;fspid Fiwg;gjw;fhd eltb f;iffis r%ofkl;lj;jpYk; epu;thfkl;lj;jpYk; Nkw;nfh s;sy; Mfpa tpje;Jiu fs; Kd;itf;fg;gl;Ls;sd.

Rfhjhuj;jpid Nkk;gLj;Jtjw;fhf kf;fSf;fhd Rfhjh u eytrjpfspid Vw;gLj;Jtjw;fhd eltb f;iffSf;F muR c j;Ntfk;nfhLj;jy;> Rfhjh u eyid Nkk;gLj;j kf;fspd; xj;Jiog;gpidg; ngw;Wf;nfh s;Sjy; Mfpa tpje;JiufSk; nghUshjhuj;jpid Nkk;gLj;Jtjw;F tWikapidf; Fiwg;gjw;fhf murpdhy; eilKiwg;gLj;jg;gLfpd;w [drtpa> rKu;j;jp Nghd;w jpl;lq;fSk; nrad;KiwfSk; gaDWjpkpf;ftifapYk; fpuhkq;fspy; thOk; kf;fspd; Mf;ff;\$Wf spid tsu;f;Fk; tpjj;jpYk; mjpfpupfspdhy; Kd;ndlLj;Jr; nry;Yjy;> NKYk; ,f;fpuhkq;fs; tptrhaf; fpuhkq;fshf ,Ug;gjdhy; mtw;wpid mgptpUj;jp nra;tjw;fhd eltb f;iffspid vLj;jy;> Ma;Tg;gpuNjr kf;fspd; gpujhd njhopyhd kPd;gpba pid Kd;Nd w;w eltb f;ifnaLj;jy;> fpuhkkl;lq;fspy; fhzg;gLk; mgptpUj;jpf;F jilahf tpsq;Fk; r%f fyhr;rhuq;fis khw;wpaikj;jy; rPjdk; Nghi jg;nghUl;ghtid> kw;Wk; tPzhd nrytpdq;fis f; Fiwj;J Nrkpg;gpid Cf;Ftpj;jy;> ,f;fpuhkq;fspy; Ranjhopy; tha;g;Gf;fspid cUthf;Fjy;> cl;fl;likg;G trjpfspid mjpfpupj;jy;> tptrhae;jtpu;e;j Vida rpWifj;njhopy;fspd;ghy; kf;fspd; ehl;lj;jpid mjpfpupj;jy;> ,f;fpuhk kf;fs; tWik Nfhl;bw;Fs; tho;tjdhy; muR ,f;fpuhkq;fspYs;s kf;fspw;F mj;jpatrpag; nghUl;fis Fiwe;j tpiyapy; ngw;Wf;nfhLj;J mtu;fspd; tho;f;ifj;juj;jpid mjpfpupf;f eltb f;if vLj;jy; Mfpa tpje;Jiu fs; Kd;itf;fg;gLfpd;wd.

,itk;Lkd;wp mf;fpuhkkf;fspd; r%f mgptpUj;jpf;fhf kf;fspd; eyid Nkk;gLj;Jk; nraw;ghLf spid Kd;ndlLj;Jr;nry;Yk;> kf;fs; jiytu; murpay ppy; <LgLjy; murpay;thjpf s; fl;rpNgjkpd;wp mgptpUj;jp nraw;ghLf spid Kd;ndlLg;gJld; jq;fSf;Fs; xw;Wikapid tsu;j;J mgptpUj;jpf;fhd jilf spid fisjy;> cyfkakhf;fy;> efuhf;fk;> njhlu;Grhj dk; vd;gtw;wpdhy; Vw;gl;LtUk; khw;wq;fspy; gaDs;sij vLj;Jf; nfhs;Sk; tpjj;jpyhd mwpTWj;jy;fspidAk;> njhopy;El;g mwptpidAk; fpuhk kf;fspw;F toq;f eltb f;ifnaLj;jy;> #oy; njhlu;ghd rpe;jidf spidAk;> nraw;ghLf spidAk;> Kf;fpaj;Jtj;jpidAk; ,f;fpuhkj;jpYs;s kf;fspw;F czu;j;jy; Mfpa tpje;JiufSk; Kd;itf;fg;gLfpd;wd.

**crhj;Jizfs;;**

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njd;dNfhd;. B> (1995)> “,yq;ifpd; fpuhkpa tWikia Fiwg;gjw;fhd cj;jpfSk; epfo;r;rpj; jpl;lq;fSk;”> nghUspay; Nehf;F ([dtup/khu;r;)> kf;fs; tq;fp ntspaPL.

“mk;ghiw khtl;l Gs;sp tpguj;jpul;L - 2008”; khtl;l nrarfk;> mk;ghiw.

**Y%S ,xldfō j;= wxYfha wOHdmkh" ;reK ú/lshdj iy /lshd  
wfmaCId w;r iinkaO;djh wOHhkh lsrSu'**

**jhs ta cS mS fla chfialr**

**iy**

**hQ tia ;;airKS**

wd¾:sl úoHd yd ixLHdk úoHd wOHkdxYh' Y%S ,xld inr.uqj úYaj  
úoHd,h

**uQ, mo ( wOHdmkh" ;reK ú/lshdj" j;= wxYh" m%j¾Ok m%;smdhkh**

### **ye | skaùu**

j¾;udk f,dalfha ;reK ú/lshd ;;a;ajh ms<sn|j i,ld n,k úg  
f,dj mqrdu wjqreý 15-24 w;r jhfia miq jk ;reKhka ixLHdj  
i,shkh blaujhs' ^fyÜaf.a" fih¾" id,sya" 2002& Y%S ,xldfō  
wjqreý 15-19 w;r msrsfia fiajd úhqla;s wkqmd;h 20'6] o" 20-  
29 w;r msrsfia fiajd úhqla;s wkqmd;h 13'2] o jk w;r W.;a  
ldka;djka w;r by< fiajd úhqla;s wkqmd;hla olakg ,efí' ^Y%S  
,xld uy nexl= jd¾;dj" 2008&' wOHdmkfha iy /lshdjka f.a fkd  
.e<mSu w;r hï in|;djhla we;s nj;a th b;d ý¾j, jQ tlla nj;a  
l=i,;djhka f.a úYu;djh ms<sn|j jQ kHdh u`ska meyeos,s  
flfrhs' ^Alka obadic, 2005&

2010 Y%S ,xld uy nexl= jd¾;djg wkqj Y%S ,xldfō ú/lshd  
wkqmd;h uE; ld,Skj wLKavj my< hk Wmk;shla olajhs' kuq;a  
wjqreý 19-24 w;r ;reK ú/lshdj ;ju;a by< w.hla ksrEmkh lrhs  
^CFSES-2003/2004&'

iuia; ú/lshdj ie,lsfi os j;= wxYfha ú/lshdj .%dóh yd  
kd.rsl wxYhka wNsnjd f.dia ;sfí' 2006\$2007 .Dy l=gqiN  
wdodhi yd úhoi ióCIKh wkqj lsis od mdi,a fkd .sh m%;sY;h  
15'8 l ;ri by< w.hla j;= wxYfhka jd¾;d jk w;r th kd.rsl  
wxYhg jvd mia .=Khla muK by< h' fi ksid j;= wxYh ;=<  
wOHdmkh yd ú/lshdj hk wxY folu .eg,qldrS ;;ajhkag uqyqK fok  
w;r ;reK ú/lshdfō m%udKh o fuu wxYh ;=< by< fō'

wOHdmkh by< h;au ú/lshdj by< hdu kd.rsl yd .%dóh wxYhkays  
fukau j;= wxYh ;=< o olakg ,efnk w;r th wfkl=;a wxY folg  
jvd ;Sj%j mj;skakls' ^CFSES-2003/2004&

Q kHdh ^Q Theory& g wkqj wju wfmaCIs; jegqm yd ú/lshdfō ld,h w;r iinkao;djhla mj;S' t fukau /lshdjla n,dfmdfrd;a;= jk wxYh ^rdcH" fm!oa.,sl& u; ú/lshdj ;SrKh lrk nj wdl,amuh fkd .e,mSi ixl,amfhka meyeos,s fō'

by; ú.%y l< wxYhkays mj;akd Wmk;Ska i,ld ne,Sfi oS j;= wxYfha ;reK ú/lshdj flfrys n,mdk idOl wOHhkh lsrSu ld,Skj m%uqL;djhla ,nd osh hq;= wx.hla nj fmks hhs'

1 jeks j.=j ( wOHdmk uÜgu yd jhi wkqj fiajd úhqla;s ;ajhka

| ldKav              |                    | wxYh       |            |            |             |
|--------------------|--------------------|------------|------------|------------|-------------|
|                    |                    | kd.rsl     | .%dóh      | j;=        | uqz         |
| <b>wOHdmk uÜgu</b> | mdi,a fkd hk       | 1'1        | 0'7        | 1'3        | <b>0'8</b>  |
|                    | m%d:ñl             | 0'7        | 1'6        | 4'6        | <b>1'9</b>  |
|                    | oaú;Sl             | 9'0        | 8'3        | 16'5       | <b>8'7</b>  |
|                    | w'fmd'i' ^id\$fm<& | 9'0        | 14'5       | 18'5       | <b>13'8</b> |
|                    | ^W\$fm<& iy by<    | 13'2       | 19'4       | 28'2       | <b>18'2</b> |
|                    | <b>uqz</b>         | <b>8'8</b> | <b>8'9</b> | <b>9'2</b> | <b>8'9</b>  |
| <b>jhi</b>         | 15-18              | 29'6       | 35'8       | 44'8       | <b>36</b>   |
|                    | 19-24              | 27'9       | 30'6       | 26'3       | <b>30</b>   |
|                    | 25-34              | 8'2        | 9'2        | 6'7        | <b>8'9</b>  |
|                    | 35-44              | 2'8        | 2'0        | 1'9        | <b>2'1</b>  |
|                    | 45-54              | 1'7        | 0'7        | 0'8        | <b>0'8</b>  |
|                    | 55 iy by<          | 6'3        | 0'5        | -          | <b>0'4</b>  |
|                    | <b>uqz</b>         | <b>8'8</b> | <b>8'9</b> | <b>9'2</b> | <b>8'9</b>  |

uQ,dY%h ( mdrsfNda.sl yd uQ,H ióCIKh 2003\$2004

### wruqKq

j;= wxYfha wOHdmkh" ;reK ú/lshdj" iy /lshd wfmaCIIdjka w;r  
 iinkaO;djh ms<ssn|j wOHhkh lsrSu fuys m%Odk wrugK fõ'  
 ú/lshdj ^ld,h& iy /lshd wfmaCIIdjka ^wju jegqm& w;r  
 iinkaO;djh yd ;reK ú/lshdfõ ,CIK ^m%cd úoHd;aul& y÷kd.ekSu  
 wkq-wruqKq w;r fjhs'

## 1%ufõoh

iS\$i n,xf.dv jeú,s iud.fí rdiai., j;= hdfha /lshd úrys;  
 ;reK ;reKshka 50 la ir, iiiNdù ksheoSSu hgf;a m%d:ñl o;a;  
 f,i o ^2003\$2004 & mdrsfNda.sl yd uQ,H ióCIKhg wkqj j;= wxYh  
 ;=< isák jhi wjqreý 15-28 w;r ;reK ;reKshka 55676 lska  
 605 1 ksheosshla ^53 la fiajd úhqla;slhka yd 552 fiajd  
 kshqla;slhka jk mrsos& ia:r 2 la hgf;a ialD; iiiNdù ksheýqi  
 l%uh u.ska oaú;Sl o;a; f,i o bosrsm;a fldg we;'

o;a; úYaf,aIKh i|yd m%j%Ok m%;smdhk wdld;sh fhdod .eksks'  
 tys oS mrdh;a; úp,Hh fldgia 2 lska iukaú; úh'

fiajd úhqla;slhl= ùu

$$P = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}$$

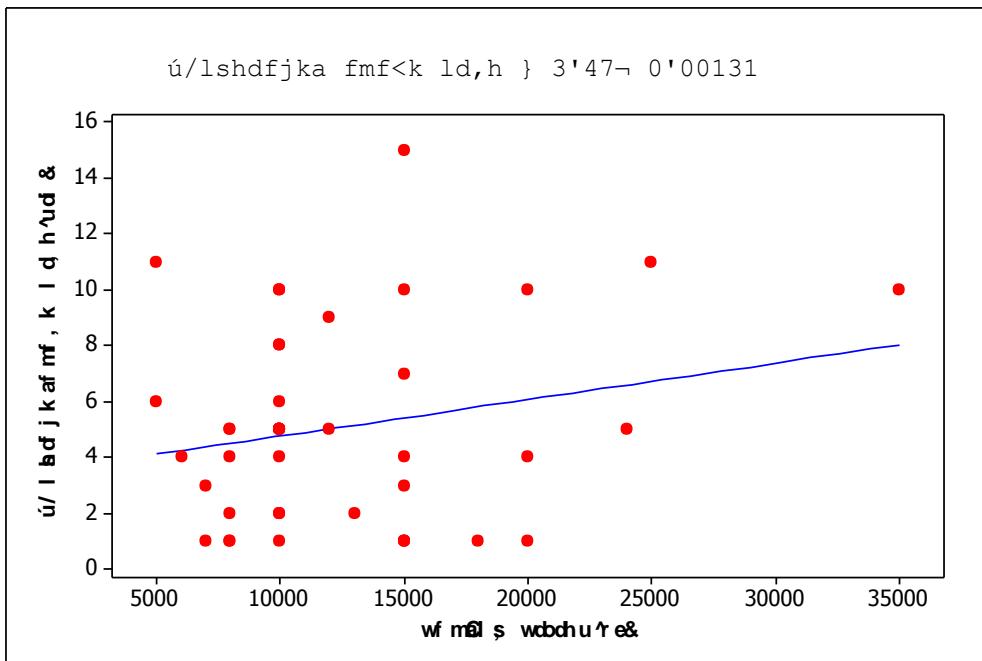
fiajd úhqla;slhl= fkd ùu

$$1 - p = \frac{1}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}$$

$Y = (\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)$  wdld;sfhka nyq.=K m%;smdhk  
 úYaf,aIKh i|yd mjqf,a wdodhu" /lshd wxYh" ia;%S mqreI Ndjh"  
 újdydyl wújdydyl nj" wOHdmk ;;ajh" jhi" mossxÑ wxYh" /lshdj1  
 m<mqreaoao yd /lshdfõ iajrEmh hk iajdh;a; úp,Hhka iu.  
 /lshdjla fidhk ld,h mrdh;a; úp,Hh f,i fhdod .kakd ,oS'

m%;sM,

1 jeks rEmh ( o;a; bosrsm;a lsrSu



uQ,dY%h ( ksheos ióCIKh

wju wfmacIs; jegqma m%udKh re' 5000 isg 10000 la olajd jk úg fiajd úhqla;j isák ld,h wdikak jYfhka udi 6-8 muK jk w;r jegqma m%udKh Bg jvd jeä j;au" tki 15000 yd Bg jvd jeä jk úg" fiajd úhqla;j isák ld,h udi 8 blaujhs' j;= wxYh ;=< wdikak jYfhka 30] la oaú;Sl wOHdmkh ,nd we;s uq;a 70] u oaú;Sl wOHdmkhla ,nd fkdue;' ta w;r 39] lu wOHdmk uÜgu 5 jirg jvd wvq h' lsis od mdi,a fkd .sh 54] la o ta w;r fð' jeä jYfhka fiajd úhqla;j isákqfha wjqreý 15-25 ^43]&" 26-35 ^29]& yd 36-45 ^14]& jhia ldKavhka h'

m%j%. úp,Hhka y;r ^wOHdmk uÜgu" mjqf,a idudcsl ixLHdj" ia;%S mqrei Ndjh" mjqf,a wdodhi üGu& iy tla iuqðñ; úp,Hhla ^jhi& Ndú;fhka mshjr l%uh ^Step wise& hgf;a iqyiqu wdlD;sh f.dv kõk ,oS'

$$\text{logit } p(\chi) = \beta_0 + \beta_1^{idudcslxLHdj} + \beta_2^{wdodhi Ügu} + \beta_3^{wOHdmk Ügu} + \beta_4^{jhi}$$

2 jeks j.=j ( wjidk wdlD;sh

| <b>wjidak wd1D;sh</b>         |             | <b>mrdñ;sh</b> | <b>Wald -w.h</b> | <b>Pw.h</b> |
|-------------------------------|-------------|----------------|------------------|-------------|
| 1& mjqf,a idudcslhska         | 1-2         | -3.789         | 10.186           | 0.001       |
|                               | 3-5         | -2.189         | 12.258           | 0           |
|                               | 6-8         | -1.979         | 8.75             | 0.003       |
| 2& wdodhiüÜgu re 5000-10000   |             | 0.15           | 0.151            | 0.697       |
|                               | 10000-15000 | -0.457         | 0.267            | 0.605       |
|                               | 15000g jeä  | -20.193        | 0                | 0.999       |
| 3& wOHdmk uÜgu - mdi,a fkd.sh |             | 2.005          | 3.453            | 0.063       |
|                               | 1-5         | 3.386          | 9.943            | 0.002       |
|                               | 6-11        | 4.285          | 14.212           | 0           |
|                               | 12-13       | 25.758         | 0                | 0.999       |
| 4& jhi                        |             | 0.048          | 9.917            | 0.002       |
| ksh;h                         |             | -4.504         | 10.281           | 0.001       |

uQ,dY%h ( mdrsfNda.sl yd uQ,H ióCIK jd¾;dj 2003\$04

wOHdmk uÜgu kue;s úp,Hh .ek ie,lsfi os meyeos,s jkafka  
 wOHdmk uÜgu jeä fj;au ^mdi,a fkd.sh ( 4'89]" 1-5( 11'9]"  
 id\$fm( 24'3]" W\$fm( 99'9]& fiajd úhqla; ùfi iiNdú;djh  
 by<ska mj;sk nj h' idudcsl ixLHdj jeä j;au ^1-2(1'88]" 3-  
 5(7'89]" 6-8(14'6]" 8g jeä(30'47]& fiajd úhqla; ùfi  
 iiNdú;djh by< f.dia we;' mqreIhl= fiajd úhqla; ùu 6'91]  
 jqj;a ia;%shl fiajd úhqla; ùu 14'6] ù we;s w;r wjidk  
 wd1D;sh f.dv keÖSSfi os th jeo.;a idOlhla ù fkdue;'

3 jeks j.=j ( nyq.=K m%;smdhkh

ú/lshdfjka fmf<k ld,h = - 15.5 - 1.04 ^/lshdfõ m<mqreaoao& - 13.2  
 ^fou<&  
 + 0.686 ^jhi& - 20.8 ^mqreI& + 10.4  
 ^újdy&  
 + 27.5 ^Wiaafm<& + 1.70 ^wOHdmkh ,enQ  
 jir&  
 - 28.0 ^úêu;a mqoa.,sl& -34.4 ^wúêu;a  
 mqoa.,sl&  
 wd1D;sh fjfiishd;aul ^F= 3.64, P=0.001& fõ'

uQ,dY%h ( ksheos ióCIKh

**ks.uk**

j:= wxYh ;=< mqoa.,hl= fiajd kshqla; yd úhqla;ùu flfrys bvi ysñldrS;ajh" ksjfia ;;ajh" m,d;" ck j%h yd újdydyl wújdydyl nj n,md fkdue;s w;r wOHdmk uÜgu" jhi" mjqf,a wdodhi uÜgu yd idudcsl ixLHdj hk idOl n,md we;'

wfmaCIs; jegqma uÜgu yd mdi,a .sh jir .Kk jeä jk úg ú/lshdfjka fmfc<k ld,h by< .sh o /lshdjl m,mqreaoao ^wjqreooq .Kk& u; th wvq fõ' isxy, wfhl=g idfmaCIj øúv wfhl=f.a;aa" .eyekshlg idfmaCIj msrsñhl=f.a;a rcfha /lshdjlwfmaCIs; whl=g idfmaCIj fm!oa.,sl wxYfha /lshdjlwfmaCIs; whl=f.a;a ú/lshdfjka fmfc<k ld,h wvq ù we;'

j:= wxYh ;=< W.;a ;reK ;reKshka b,lal lr.;a /lshd mqyqKq jev igyka l%shd;aul lsrSu" jD;a;Sh mqyqKq mdGud,d iy WmfoaYk fiajd ,nd oSu iy iajhx /lshd ,nd oSu i|yd uQ,H myiqli wdosh ,nd oSu ;=<ska fiajd kshqla;sh by< kexùu" há;, myiqli j%Okh lsrSu ;=<ska j:= wxYfha wOHdmk ;;a;ajh by< oeóu yd /lshd wjia:d j%Okh lsrSu" úfoaY /lshd wjia:d ms<sn| oekqu jeä lsrSu ;=<ska úfoaY /lshd i|yd fhduq lsrSu" mrafhAIKfhka cks; m%;sm;a;s osYdk;Ska f,i i|yka l< yels h'

**wdY%<sup>s</sup>; .%ka:**

uy nexl= jd%4;d" 2000-2008' fld<U' Y%S ,xld uy nexl=j'  
 ieuqfj,aiaka" fmda,a ta' iy fkda%4âyjqia" ú,shi ã' 1990'  
 wd%4:sl úoHdj ( fld<U (iS\$;i ;sir m%ldYlfhda'  
 fidauiqkaor" o' 1992' ixj%Ok wd%4:sl úoHdj' fld<U ( tia'f.dvf.a iy ifydaorfhd'a'

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## **Explaining Rural Poverty in Developing Countries: Evidence from Senegal**

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**Key Words:** *Rural poverty, food market, probit, Senegal*

### **Introduction**

Despite global progress in poverty reduction, around 2.5 billion people still live on less than USD 2 per day. Most of these poor live in rural areas (Otte et al., 2008). In Africa, poverty is still increasing (Collier, 2007), and is so catching the attention of researchers and the international community.

Poverty in Senegal generally follows the same pattern as described by Otte et al. (2008) with a higher percentage of poor people living in rural areas. For example, rural poverty has dropped from 71.0 percent in 1994/1995 to 65.2 percent in 2001/2002 and to 57.79 percent in 2005 (IMF and IDA, 2006 and ESPS, 2005). Given that the bulk of poor are located in rural areas, looking at the factors affecting rural poverty is necessary to reduce poverty in Senegal.

For decades, poverty reduction has been at the center of the preoccupation of different governments in Senegal. This can be witnessed by, for instance, the Poverty Reduction Plan formulated in 1997 and the recent Poverty Reduction Strategy Papers (PRSPs) of 2002 and 2006 (IDA and IMF, 2002; IMF and IDA, 2006). However, to efficiently fight against, or to reduce poverty, it is essential and wiser to target the most affected social stratum and investigate the main determinants of the phenomenon.

We pay attention to rural poverty and the role of proximity to local food markets. Availability of markets is important in rural areas because it can help create and foster social capital and also encourage economic activities among individuals in the community.

## Theoretical Foundations

The theoretical basis underlying this study draws from the literature on the determinants of poverty (Datt and Jolliffe, 2005). The main idea is that education and the existence of markets not only enable individuals to have higher earnings but also influences their behavior and decisions and consequently affects their fulfillment of basic needs and avoidance or escape from poverty.

Although research on the impacts of the existence of markets on rural poverty is scarce in the case of Senegal, it is to be noted that a few studies have been done in the context of Sub-Saharan African countries. For example, Ellis and Mdoe (2003) have shown that rural poverty in Tanzania is strongly associated with, among other factors, the lack of land and livestock. In addition, Khan (2000) has reviewed the factors explaining rural poverty in developing countries stressing the importance of markets.

## Objectives

The objective of this study is to analyse the determinants of rural poverty in Senegal using the household heads data and paying attention to the role of the availability of markets. Specifically, we investigate the importance of (1) household characteristics, (2) community related factors and (3) asset ownership.

## Methodology

The econometric model in this study follows the theoretical foundations described in Datt and Jolliffe (2005) and extensively used in the literature. The econometric model can be specified as follows:

$$P^*_i = H_i\alpha + C_i\beta + A_i\delta + X_i\gamma + \varepsilon_i \quad (1)$$

where  $P^*$  stands for the poverty status of household head  $i$ ,  $H$  is the vector of household characteristics,  $C$  represents the vector of community related factors,  $A$  is the vector of asset ownership,  $X$  means the vector of other controls and  $\varepsilon_i$  the error terms.

Given the nature of the dependent variable, a probit estimation method [and instrumental variable (IV) probit model] is used to investigate the factors affecting rural poverty.

## Results

The empirical results are shown in the Table 1

Table 1. Determinants of rural poverty: Results

|                            | Simple probit<br>(1) | IV probit<br>(2)     | IV probit,<br>Female (3) | IV probit, Male<br>(4) |
|----------------------------|----------------------|----------------------|--------------------------|------------------------|
| Educated household head    | -0.142**<br>(0.069)  | -1.718***<br>(0.452) | 0.928<br>(1.152)         | -2.006***<br>(0.424)   |
| Distance to closest market | 0.088***<br>(0.014)  | 0.061***<br>(0.018)  | 0.079<br>(0.048)         | 0.055***<br>(0.019)    |
| Ownership of land          | -0.006<br>(0.012)    | 0.002<br>(0.011)     | -0.563***<br>(0.209)     | 0.007<br>(0.011)       |
| Ownership of tractor       | -0.655***<br>(0.250) | -0.525**<br>(0.243)  | -                        | -0.425*<br>(0.246)     |
| Ownership of plough        | -0.142***<br>(0.055) | -0.159***<br>(0.051) | -0.462<br>(0.324)        | -0.149***<br>(0.051)   |
| Ownership of cart          | -0.110**<br>(0.053)  | -0.083<br>(0.052)    | 0.003<br>(0.266)         | -0.086<br>(0.053)      |
| Farmers                    | 0.459***<br>(0.050)  | 0.243**<br>(0.097)   | 0.428**<br>(0.201)       | 0.199*<br>(0.104)      |
| Married household head     | -0.151<br>(0.102)    | -0.171*<br>(0.095)   | -0.398<br>(0.280)        | -0.005<br>(0.125)      |
| Age of the household head  | 0.006<br>(0.010)     | -0.002<br>(0.010)    | -0.038<br>(0.037)        | -0.005<br>(0.010)      |
| Squared age                | -0.000<br>(0.000)    | -0.000<br>(0.000)    | 0.000<br>(0.000)         | 0.000<br>(0.000)       |
| Female headed household    | -0.244***<br>(0.093) | -0.387***<br>(0.092) | -                        | -                      |
| Size of the household      | 0.075***<br>(0.005)  | 0.062***<br>(0.009)  | 0.128***<br>(0.044)      | 0.053***<br>(0.010)    |
| Constant                   | -2.198***<br>(0.296) | -0.795<br>(0.584)    | -1.473<br>(1.061)        | -0.598<br>(0.644)      |
| Observations               | 3,673                | 3,673                | 328                      | 3,343                  |
| R-squared                  | 0.175                |                      |                          |                        |

Notes: The dependent variable is headcount poverty; Dakar is taken as a base group for the regional dummy variables. t-statistics are given within parentheses. \*, \*\* and \*\*\* represent the significance at 10%, 5% and 1% respectively. The variable 'education' has been instrumented and the instruments used are the distance to closest primary school and closest secondary school. The regional dummies are not included in the table due to space limitations.

Educated household heads are generally less likely to be poor; exception is made for the case of female headed households probably because female education is not very well encouraged. Household heads (mainly male) closer to the food markets are less likely to be poor mostly because of the opportunities given and the exchanges taking place. Besides, farmer household heads are more likely to be poor compared to the household heads working in other sectors.

The results also show that the ownership of tractor and plough is negatively and significantly associated with the poverty status of rural household heads.

### **Conclusion and Policy Recommendations**

This study empirically investigates the determinants of rural poverty classifying the factors into household characteristics, community factors and asset ownership. The findings show that the proximity to local foods market is an important factor that affects the poverty status of household heads living in rural areas. Education and assets ownership are the other factors correlated with the poverty status of rural household heads.

As policy recommendation, existing educational efforts should be geared toward every person living in rural areas while markets should be created or encouraged to motivate the households not only to acquire physical capital but also to exchange their products.

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