

Rural out-migration and economic development at origin

What do we know?

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Abstract

Labour migration is a pervasive feature of economic development. People mobility for temporary or permanent labour purposes is a routine part of agricultural activity. There are very significant migration flows in some developing areas, with considerable impacts on individuals, households and regions at origin. Despite the growing debate about motivations and impacts of recent migration flows, costs and returns of this global phenomenon are still unclear and remain far outside the public policy realm. This is true especially with respect to migration of people from rural areas of developing countries. The purpose of this paper is to review key issues relating to rural labour migration and its links to economic development at origin. What is the impact of migration, both internal and international, on rural and 9(o-'lic i.000Lp1.1(v2

The multi-faceted dimension of migration

175 billion people - 2.9 percent of the world's population - currently live outside their country of birth. The number of migrants has more than doubled since 1975, and sixty per cent of the world's migrants currently reside in the more developed regions, with 40 per cent living in the less developed regions (UN 2002). Yet, aggregate figures on international migration fail to capture the vast scale of migration that also takes place within countries. For instance, there are estimated to be 200 million temporary and seasonal migrants in India, and 120 million internal migrants within China. South-north migration has important implications for development and poverty reduction in developing countries. But migration is not primarily a south-north phenomenon. Most migration, and especially labour mobility of the poor, takes place within and between developing countries. For example, several African countries simultaneously serve as both source and hosts to large number of migrants (Lucas 2005b). Many countries in southeast Asia are heavily-reliant on cheap migrant labour from neighbouring countries; international migration from Vietnam between 1994 and 1999 of 300,000 is far exceeded by the 4.3 million people who migrated within Vietnam over the same period; and, in many developing countries, urbanisation is fed by large volumes of ruralurban migration (IOM 2003).

Micro-studies or village level studies are better at capturing a wide range of possibilities in the spectrum of temporary migration, mainly seasonal migration, circular migration and commuting. They are all short-term forms of migration but while seasonal migration is related to fixed-term contracts or agricultural cycles, circular migration typically refers to the process of migration followed by return to the original home area (possibly the same place, but at least the original region) (Lucas, 2005). Commuting, on the other hand, has become a feature in many peri-urban areas and villages near cities and metropolises; given improved communications, roads and new economic opportunities arising from urbanisation, it is a growing phenomenon involving rural households (IOM 2005).

A significant proportion of migrants, and perhaps even the majority, migrate on a *temporary basis*, either for a number of years before returning home, or migrating to and from each year (IOM 2005). For instance, many Haitians go backwards and forwards between their home country and the decides whether or not to move, typically from rural to urban areas, on the basis of the expected income maximisation objective and, thereby, of wage differentials between origin and destination areas (see also Harris-Todaro, 1970). Despite its seminal contribution to understanding people outflows, this approach has failed to account for the risky nature of migration and the empirical evidence showing that people movement does not equilibrate expected incomes across regions (Rosenzweig, 1988; Katz, E. and Stark, O. 1986). Indeed, the main limitation of Todaro model is that it does not include any other influences, besides expected income, that shape potential migrants' decision and also potential impacts on source economies. Furthermore, it fails to explain temporary migration and the substantial flow of remittances from migrants to people at origin (Taylor and Martin, 2001). These issues, on the other hand, are the most pervasive features of out-migration phenomena, especially from rural areas.

The perspective that migration is not driven by labour market imperfections only, but by a variety of market failures, including missing or incomplete capital and insurance markets, is a trademark of the more recent New Economics of Migration Labour (NELM) (Stark and Bloom, 1985; Stark, 1991). A further novelty of the latter approach is that migration decisions are viewed as taking place within a larger context than the domain of isolated individuals, typically the households or families. Also the economic position of households at community level (their 'relative deprivation') influences the household behaviour with respect to migration (Stark et al., 1986; Stark and Taylor, 1987, 1989). The NELM approach conceives migration as a family strategy whereby migrants and resident household members act collectively not only to maximise income, but also to minimise risks, diversify income earnings and loosen financial constraints through remittances (Stark and Levhari, 1982; Stark and Katz, 1986, Taylor, 1996). Migrants and household members at origin maintain connection and cooperation over long distances through a combination of familial loyalty, exchange of transfers and parental asset pooling (Stark and Levhari1982). If follows that, according to the NELM approach, migration impacts are conceived in term of risk diversification management, income and alleviation of liquidity constraints at household level.

Like other institutions in rural areas that lack perfect markets, migration may play a complex role in developmental achievements and poverty alleviation in local communities. 'Spatiallydiversified' families represent an institution arising from the difficulties of self-insurance in lowincome settings, and especially influenced by the risky nature of rural production (Rosenzweig, 1988). Moreover, subsequent remittances from migrant members increase household liquidity and may contribute to alleviate binding credit constraints (Katz and Stark 1986; Stark, 1991). Households may use migrant remittances primarily to supplement income or conversely to invest in productive activities. Off-setting factors of migration include reduced labour supply and growth rate, and in some cases, a process of population aging. This issue is related with the decrease of fertility that has been occurring for some decades and with the lower mortality rate of adults that tends to increase the top percentiles of age distribution. These phenomena entail a deficit in the number of young people entering the labour market and a growing gap between active and passive population. Population theorists identify migration as the compensatory factor that serve to release some of the pressure on resources caused by the gradually increasing new demographic imbalances. (Lesthaeghe and Kaa, 1986; Kaa 2004).

Who migrates?

Typically migrants are not a random sample of the overall population but they have some kind of human capital different from people staying put (Sjaastad, 1962, Todaro 1980). A well developed literature address the question of migrant selectivity providing the migration theories presented above with a micro-grounding, permitting a number of testable hypotheses about migration determinants and impacts (Taylor and Martin, 2001).

Thus, according to the human capital migration theory, migrants' self-selection is driven by factors such as the education level, skills, age, risk taking capacity, capacity to face new situations, entrepreneurship and ethnicity. This is so because these individual characteristics increase the discounted income (or expected-income) and destinations. These motives would be different by age and sex selectivity, levels of education, skills and the requirements of receiving countries. In a recent work combining main theoretical approaches to explain Albanian migration, for example, Carletto et al. (2005) show how individual, household and community (networks) factors have all a significant role in the decision to migrate. They also find evidence of the importance of heterogeneity of these factors in influencingfs-2.GseneitDypives mfr(n)7(gratild)6(an()]JT0.0006 T1.058245 Tw[dest)7)3(grati)71. i.ed m te imp

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(2001) find that Turkish migrants to Germany are likely to become active entrepreneurs when returning home, primarily using savings from their German earnings to finance their businesses.

Similar results are found by Woodruff and Zenteno (2001) in Mexico and by Black et al. (2003), who report small enterprise development among return migrants to Ghana. Adams (1991) has shown that in rural Egypt, remittance flows are directed primarily to investment in land where the economic rates of return are higher than in other areas. The author explains that this is due to the higher marginal propensity to invest of migrant-sending households and to domestic policy biases against agriculture, which discourage agricultural investments in favour of land purchases. In another paper of De Brauw et al. (2003), they set out to use NELM to explore the effects of China's migration on the households (Taylor and Adelman, 1996; Taylor 1996; Adelman, Taylor and Vogel 1988). The key question, though, is how spillover effects are distributed as inequality concerns may arise (see section 4 below).

Yet, there is also the danger that remittances may compete with rural production and slow economic expansion. In first instance, inflows of remittances may cause a real appreciation of the exchange rate similar to a situation of 'dutch disease'. This would hamper the export performance and thereby output growth and employment at macrolevel. In second place, remittances may play a role in accelerating urbanization (fostering other rural-urban migration), or the contraction of agriculture through labour withdrawal. These issues have been surprisingly given little attention by the empirical literature but there is some scattered evidence of those in contexts such as Albania and Morocco (Lucas, 2005).

Albania, for example, has come to depend very substantially upon remittances. The latter, though, may have imposed some costs, notably in terms of postponing real currency depreciation and hence potential export growth, and leading to urban relocation of agricultural labourers (Lucas, 2005). In particular, evidence from interviews in Albania (King et al. 2003 cited in Lucas 2005) suggests that remittances from international migration are often used to finance internal migration to the urban areas. This form of remittance investment may concentrate the benefits of migration, whether direct or indirect, upon Tirana and the other main towns rather than upon the poorest rural areas (see also Carletto et al. 2004 and IOM 2005b on policy implications for Albanian migration dangers). In Morocco, it has been shown a negative impact on agricultural output, because some farmers are able to live from remittances and abandon cultivation (Glytsos, 1998, cited in Lucas 2005).

Therefore, overall estimated effects of rural labour migration are likely to be downward biased if the migration elasticity is ignored. As pointed out by Taylor and Martin 2001, the lost agricultural product of the migrant who secures an urban job does not represent the full opportunity cost of rural out-migration if more than one rural worker is induced to migrate. The opportunity cost for the rural sector also includes the loss of agricultural production of others who migrate (who possibly have no fortune in finding urban job).

Another major concern of migration at community level is the loss of human capital derived from the departure of skill migrants (the 'brain drain' a result that they interpret as largely reflecting the lower cost of living in the rural area conflicting with the psychological costs of separation. In other rural economies as well (such as in Central America or India for example), many women increasingly have the responsibility of agriculture after their men deserted the village and migrated for an extra-income. That women work in farms is nothing new. But the women having to virtually become custodians of their land in the absence of men, is something new. Implications of this process of 'feminisation of agriculture' are largely under-investigated but they are likely to change local labour market - in terms of shortage of male work force and upward pressure on the wagesand household livelihood strategies - male rural out-migration could push women and children into the labour marker under unfavourable conditions (Katz, 2003).

Overall, the lack of systematic analyses of the impact of migration on local labour market, lead Lucas (2005) to conclude that changes depend in first place on how highly localised are the labour market responses to emigration, which in turn depends on the degree of integration of spatially separated labour markets and hence on the links between internal and international migration. It depends also upon (i) institutional barriers to wage flexibility in agricultural market, (ii) the prevalence of surplus labour of this type, (iii) the role of international trade in the relevant product markets, (iv) ability of others to rapidly acquire skills or relocate residence to take up vacated positions, and the passage of time (see also Lucas 2005b).

In general, as pointed out by Taylor and Martin (2001), migration is likely to have the largest positive effect on rural source economies when the losses of human and other capital from outmigration are small; when the benefits of migration accrue disproportionately to households that face the greatest initial constraints to local production; and when households that receive remittances have expenditure patterns that produce the largest rural income multipliers.

Multidisciplinary approach to temporary migration

Temporary migration is a structural feature of agricultural economies. It serves, together with agriculture, as a primary income source of many regions (e.g. Haberfeld et al. 1999 on India).

There are no precise information and official data on it. Yet, a large and growing number of multidisciplinary micro-studies, show that temporary migration, both domestic and overseas, are increasing and help to smooth seasonal income fluctuations, earn extra cash to meet contingencies or increase disposable income (IOM 2005; Haberfeld et al. 1999, Rogaly et al. 2001, Mosse et al., 2002, Deshingkar 2003/2004).

Inadequate data sets have led to the widespread neglect of temporary migration as an important force in rural development. Indeed, there have been few formal efforts to estimate the economic contribution of temporary migrant labour on sending regions. Some case studies and anecdotal information provide mixed evidence about temporary migration as a survival or accumulation strategy (IOM 2005). It has been broadly observed that remittances sent back home by temporary rural migrants are mainly used for such purposes as consumption, repayment of loans and meeting other social obligations (Rao 1986). This is not necessarily a negative aspect if there are positive spillovers on community well-being and multiplier effects in the economy, as mentioned above (IOM 2005).

The evidence regarding investment is mixed. Investments by migrant households in housing, land and consumer durables are common, and migrant income is also used to finance working capital requirements in agriculture. Evidence of other productive farm or non-farm investments is generally scarce, but a number of studies do report such investment by a small percentage of migrants and return migrant households (Oberai and Singh, 1983; Rogaly et al. 2001). It has been argued that rural out-migration, circular migration in particular, has strong 'safety valve' features, helpina to preserve existing relations in agriculture (Standing 1985). Greater mobility of rural labour households can also lead to a less isolated and more generalized agricultural labour market and exert upward pressure on wages. At the same time though, temporary and seasonal migrant households may be characterized by lower education levels, lower levels of income from agriculture, and by an inferior geographical location than people that stay put (Haberfeld et al. 1999). Moreover, temporary migration may act as compensation mechanisms against income fluctuations but lead to less productive investments than other forms of migration (e.g. permanent or international migration) (Mendola, 2004 on rural Bangladesh).

Overall, there is a lack of insights into migration phenomena on temporary basis. This is even more important in terms of policy implications if we consider that the US has significantly increased issues of temporary visas and the EU has usually attempted to limit labour migration to temporary workers (and many other countries, such as East Asia, do the same) (Lucas, 2005).

It has been observed that long-term economic prospects are likely to dominate decisions to relocate permanently, whereas the current economic situation may play a more important role in temporary migration decisions (Lucas, 2005). Indeed, poorer households may be more likely to participate in temporary migration (mainly internal), but whether this is a first step to further relocate or not, and whether it has positive or negative effects on the productive potential of source rural areas, would need urgent research and policy attention.

Migration and concerns about inequality

The effects of rural out-migration on economic welfare in sending areas depend critically on how emigration affects the local capital-labour ratio among non migrants - that is, on the distributional effects of migration. Moreover, an important concern of the literature on migration is that the poorest are rarely found the major beneficiaries of remittances, at least directly. This is due to the inability to finance expensive moves, such as those overseas or those requiring some degree of education, but also to the largely recognised 'exchange motive' of remittances (to protect an inheritance, to insure property, or to repay educations costs) which make larger remittances flowing to better-off families (see for example Lucas and Stark, 1985 and Hoddinott, 1992, 1994). Thus, the impact of migration and remittances on income distribution in source regions remains a matter of interest in the literature but also of some dispute.

Investigations into the existence of a correlation between well-being (i.e. asset ownership in rural areas) and migration arrive at apparently conflicting conclusions about causality. On the one hand, people are in a position to and aspire to migrate because they are better off; on the other hand, migration improves the economic position of those who migrate and as a consequence increases inequality (de Haan, 2000). The interpretations of some authors lead them to conclude that the latter direction of causality predominates (Taylor and Wyatt, 1996). and Rapoport (2004) seems to be the only one in the literature stressing the need to include indirect effects in studying the migrationinequality relationship, even though they are not able to break down the separate effect of each channel on inequality.

In sum, migration may be conceived as a diffusion process, whereby the level of migration at any point in time is likely to be positively related to past migration by village members (Stark and Bloom, 1985). As in any form of uncertain 'new activity', when information is scarce and costly, first households to participate to migration are likely to be from the upper end of the village income distribution, and those best equipped to assume a high-risk, high-return investments (Stark, Taylor and Yitzhaki, 1986). If remittances to these households are significant, they can have a notable negative effect on village inequality. who have However, villagers successfully migrated may provide valuable information and assistance, which alter the parameters characterising the subjective distribution of returns to migration for other villagers. Moreover, other externalities of migration may result in a social gain/cost in sending communities in terms of income distribution (such as the loss of human and physical capital embodied in 'certain types' of migration, the impact on productive investments at origin, consumption multiplier effect etc).

Thus, the effect of migration and remittances on inequalities over time depends critically upon social network effects and migration spillovers, where the most difficult task is to disentangle and measure them. There is a lack of evidence on this because micro-longitudinal data on migration are missing.

Going back to the literature, overall there seems to be a consensus on the fact that inequalities shape migration patterns but subsequent possible scenarios on the (reverse) impact of migration on inequality are contradictory, depending on competing indirect effects and context-specific factors.

Table 1 summarizes main findings of the reviewed empirical literature on the development impact of rural out-migration.

Key gaps and open questions for future research

Labour migration, especially from rural areas in low-income countries, is a pervasive feature of economic development. Yet, there is much more to learn about individual and household migration behaviour, and its potential effects on people and communities left behind. Knowledge gaps are due in first place to the lack of appropriate data to understanding the multi-facet migration patterns. Large scale (longitudinal) socio-economic surveys need to be (re)structured so that they can capture different forms of migration phenomena, including temporary and seasonal rural out-flows. There is also the need for better data on remittances and their use, family chain and networks, migration histories, return migration and lifecycle data.

In second place, there is an extensive literature explaining the determinants of migration but, as the latter is a dynamic ongoing process (that changes over time), some lingering questions remain open, such as whether (or under which conditions) migration is a risk-sharing mechanism or a response to idiosyncratic shock; whether the self-perpetuating nature of migration may make (strong and weak) social networks more important than economic reasons as motivations to migrate (as predicted by the 'cumulative causation theory'); to what extent migration is motivated by inequality (i.e. testing the 'relative This is important as skilled migrants may influence productivity of others, economic growth and directly contribute in the delivery of specific

References

Adams R., (1991), "The Effects of International Remittances on Poverty, Inequality and Development in Rural Egypt", IFPRI, Washington-DC.

Adams R., (2005), "Remittances, Household

Cox, D. and Jimenez, E. (1990), "Social Objectives trough Private Transfers: a review", *The World Bank Res. Observer* 5, 205-218.

Cox, Donald, Zekeriya Eser, and Emanuel Jimenez

McKenzie, D. and Rapoport, H. (2004), "Network Effects and the Dynamics of Migration and Inequality: Theory and Evidence from Mexico", BREAD Working Paper No. 063, Washington DC.

Mendola, M. (2004) "Migration and Technological Change in Rural Households: Complements or Substitutes?", Development Studies Working Paper N. 195, Centro Studi Luca D'Agliano, Milan.

Milanovic, B. (1987) "Remittances and income distribution", *Journal of Economic Studies*, 14(5): 24-37.

Mines, R. and Massey, D. S., 1985, "Patterns of Migration to the US from Two Mexican Communities", *Latin American Research Review*, 20 (2), 104-123

Mines, R., and Alain de Janvry, 1982, "Migration to the United States and Mexican Rural Development–A Case Study", *American Journal of Agricultural Economics* 64(3), 444-454.

Mosse, D., Gupta, S., Mehta, M., Shah. V., Rees, J. and the KRIBP Project Team (2002). 'Brokered Livelihoods: Debt, Labour Migration and Development in Tribal Western India' *Journal of Development Studies* 38(5), 59–88.

Munshi, K. (2003) "Networks in the Modern Economy: Mexican Migrants in the U.S. Labour Market", *The Quarterly Journal of Economics* 118(2): 549-599.

Pellegrino, Adela (2002) *"Trends in International Migration in Latin America and the Carribean"* in International Social Science Journal, volume 52, issue 165.

Pellegrino, Adela (2003) *"La migración internacional en América Latina y el Cariba: tendencias y perfiles de los migrantes*", CELADE (Centro Latinoamericano y Caribeño de Demografía), División de Población de la CEPAL, Serie Población y Desarollo n. 35.

Rao, M. S. A. (1986). Some aspects of sociology of migration in India, in: M. S. A. Rao (ed.), *Studies in migration.* Delhi: Manohar.

Rapoport, H. and Frédéric Docquier (2003) "The economics of migrants' remittances" in L.A. Gerard-Varet, S.C. Kolm and J. Mercier Ythier, eds.: Handbook of the Economics of Reciprocity, Giving and Altruism, Amsterdam: North-Holland.

Rempel, H. and Lobdell, R., 1978, "The Role of Urban-to-Rural Remittances in Rural Development", *Journal of Development Studies*, 14:324-41.

Rogaly, Ben, Daniel C., Abdur. R, Kumar. R, A. Sengupta and J. Biswas, (2002) "Seasonal Migration and Welfare/Illfare in Eastern India: A Social Analysis", *Journal of Development Studies*, Vol. 38 (5).

Rosenzweig M. (1988), "Risk, Implicit Contracts and the Family in rural Areas of Low Income Countries", *The Economic Journal*, Vol. 98 No. 393, 1148-1170.

Rosenzweig M.R., and Stark, O., (1989), "Consumption Smoothing, Migration and Marriage: Evidence from Rural India", *Journal of Political Economy* 97(4): 905-26.

Rozelle, S., Taylor, E. and deBrauw A. (1999), "Migration, Remittances and Agricultural Productivity in China", *The American Economic Review*, Vol. 89 No.2, 287-291.

Rozelle, S., Taylor, E. and deBrauw A. (1999), "Migration, Remittances and Agricultural Productivity in China", *The American Economic Review*, Vol. 89 No.2, 287-291.

Siddiqui, T. (2003), "Migration as a livelihood strategy for the poor: the Bangladesh case", paper presented at Migration Development Pro-Poor Policy Choices in Asia, Dhaka, Bangladesh.

Sjaastad, L.A. (1962), "The Costs and Returns of Human Migration", *Journal of Political Economy* 70(5)80-93.

Skeldon F., (1997), "Rural to Urban Migration and its Implication for Poverty Alleviation", *Asia Pacific Population Journal*, 12 (1).

Skeldon, R. (2002), "Migration and Poverty", *Asia-Pacific Population Journal*, December, pp. 67-82 M.

Stark, O. & Taylor, J.E. (1987). Testing for Relative Deprivation - Mexican Labor Migration, *Population Index*, 53(3): 407-407.

Stark, O. & Taylor, J.E. (1989). Relative Deprivation and International Migration, *Demography*, 26(1): 1-14.

Stark, O. (1978), "Economic-Demographic Interactions in Agricultural Development: The Case of Rural-to-Urban Migration", Food and Agriculture Organization of the United Nations (FAO), Rome.

Stark, O. (1991), *The migration of labour*, Basil Blackwell, Cambridge.

Stark, O. and Bloom, D. (1985), "The new economics of labor migration", American Economic Review 75(2): 173-178.

Stark, O. and Levhari, D (1982), "On Migration and Risk in LDCs", *Economic Development and Cultural Change 31, 191-96.*

Stark, O., Taylor, E., Yittzhaki, S., 1987, "Labour Migration, Income Inequality and Remittances: a

Case Study of Mexico", Development Research Department, World Bank, Washington.

Stark, Oded, J.Edward Taylor and Shlomo Yitzhaki (1986) "Remittances and inequality", *Economic*

Annex 1

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