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 agricultural development in sending regions? This paper examines the empirical research that, despite the paucity of data, offers a basis to glean some insights into the migration-development nexus.
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 host to large number of migrants (Lucas 2005b). Many countries in south–east 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 rural–urban 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 Dominican Republic. And in India, temporary, circular, and seasonal migration, with people moving in response to opportunities for agricultural work, or for off-farm rural employment in construction and services, has long been part of poor people’s lives (Rogali et al.2002). Much south–south migration, especially temporary, circular and seasonal migration, falls between the cracks, with migration unrecorded and migrants undocumented.

A primary impact of migration on sending regions is conceived in terms of remittances. Global remittances have grown steadily and have come to be a major source of international finance for developing regions. Systematic data exist only on the formal flows and thereby they are abundantly underestimated. Last figures report that remittances amount to $72.3 billion and are second only to foreign direct investment (FDI) as a capital flow into developing countries, and substantially exceed development aid (Ratha, 2003).

Remittances are considered the major link between migration and development at origin. More than three-quarters of world remittances go to lower mid-income and low income developing countries. India receives the largest volume ($10 billion), then Mexico with $9.9 billion, followed by the Philippines with $6.4 billion. (Ratha, 2003, using IMF Balance of Payments statistics). Remittances can be significant in terms of the GDP of developing countries. At the extreme end of remittance dependency, remittances make up over 25% of the GDP of Tonga, Lesotho and Jordan. Research shows that remittances tend to be a more stable form of finance than FDI and portfolio investments, and they remain steady, or even increase, during times of crisis and acute economic hardship in the receiving country (Ratha 2003).

While international remittance flows have been estimated for a number of countries there is not much official information on internal remittance flows although they appear to be large from anecdotal knowledge (especially in China, South East Asia and South Asia - IOM 2005).

Motivations and impact of migration: theoretical underpinnings

The theoretical literature on determinants and impacts of rural out-migration is vast and spans a broad range of disciplines1.

Traditionally much of the economic literature on migration has followed the neoclassical framework of the Todaro’s model (Todaro 1969). According to the latter each potential risk-neutral migrant

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1 For a comprehensive literature review see Massey, 1993 and Taylor and Martin 2001.
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 management, income diversification 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. ‘Spatially-diversified’ families represent an institution arising from the difficulties of self-insurance in low-income 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 human capital resources in the place of origin. These may be especially detrimental in farm households at origin widely recognised to be highly dependent on family labour for their subsistence. At the same time, though, in labour surplus economies with high unemployment rate reduced labour supply could not be a concern. Overall, empirical works are needed to shed light on competing views provided on a theoretical ground.

Besides the desire for individual income gain or the attempt to self-insure against household income uncertainty, there are other conditions that influence the decision to migrate and, above all, that shape the decision to perpetuate migration across time and space. The network theory of migration highlights the role of social relationships in fostering migration phenomena (Boyd, 1989). Interpersonal ties, such as kinship, friendship and shared community origin, between migrants, former migrants and non migration in origin and destination areas, are likely to increase the likelihood to migrate (at individual and household level). This is so because this form of social capital lowers the costs and risks of migration and increases the expected net-returns to migration (Massey 1993). Furthermore, migration is conceived as a dynamic and cumulative phenomenon in that, when it occurs, socio-economic contexts at origin are altered in the way they lead to further migration. In this sense, the commonly observed effect of social networks raise the likelihood of the next wave of potential migrants electing to move, enhancing geographic concentration of migrant’s origins. Ultimately, according to the cumulative causation theory, the self-perpetuating nature of migration may overcome the economic motivations that originated it, reducing the number of control variables for migration policy concerns (Massey, 1993).

A last feature of present day migration worth to be highlighted is the demographic disparity underlying people outflows (Pellegrino, 2003). Differently from developing countries, most of developed countries are facing an advanced demographic transition, the so called “second demographic transition”, in that they are characterised by a decrease in the population...
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) differential between migration and non-migration status, thereby increasing the propensity to move out (Taylor and Martin, 2001).

At the same time, financial and opportunity costs of migration can be substantial. Difficulties in financing initial costs may present an effective barrier to movement, so that the extent of mobility may remain limited even in the face of significant potential gains (Lucas 2005). This leads to the widely accepted argument of the 'migration hump', according to which at low levels of development there is little migration, but as development (with income and wealth) rises, so too does migration. Migration continues up to a threshold level, after which migration starts to decrease and the domestic economy begins to offer people opportunities at home (Stark and Taylor 1991; Faini and Venturini 1993; Vogler and Rotte 2000). At a micro level, this entails that the poorest people in rural areas often lack the resources to migrate, and those who migrate are members of better off households, in terms of land ownership, assets, productivity and social networks (Lipton 1980; Breman, 1996; Skeldon 2002).

Eventually, it is worth noting that historically migration was dominated by single men (de Haan, 2000), but things are changing and feminisation of migration is now occurring. This is the so-called “autonomous female migration” in that women are migrating independently and not just as accompanying spouses (IOM 2005). This form of migration has increased and become more socially acceptable in South Asia (INSTRAW and IOM 2000, Siddiqui, 2003). There is some evidence suggesting that there has been a feminisation of migration also in South America as well as in Africa (CELADE/CEPAL 2000; IOM 2005; Adepoju 2005 cited in Lucas 2005b). Davis and Winters (2001) tackle the migration-and-gender issue explicitly testing a number of hypotheses to explain female international migration decision from Mexico with respect to male. Typically, the role of networks, asset ownership and rural development appear to have uneven effects on the migration behaviour of men and women, and they also differ in case of internal or international moving (see Katz in CUREMIS II, 2003). Empirical evidence, although still scanty, validate the importance of including gender differences when studying internal and international migration.

**The impact of rural out-migration at origin: the evidence-based knowledge**

Population mobility, temporary or permanent, rural-urban or rural-rural, is a routine part of life in agricultural contexts. As mentioned above, no one element can be considered the single contributing force in fostering migration pressure, and the relative importance of each may be highly context-specific. Moreover, whatever the types of ‘free’ migration in terms of both time and space (i.e. excluding forced migration due to natural calamity or conflicts) usually it is the difference in circumstances that matter (Taylor and Martin, 2001): the perceived gap in potential incomes, the prospect of greater household security, the existence of social networks, the availability of information about migration outcomes at origin

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2 This is a relative concept. There is some evidence that poor people migrate too (in Albania for example migrants are drawn from some poor rural settings, King et al. 2003 in Lucas 2005) but it is not the poorest who move but those with access to some resources, no matter how meagre they might appear.

3 Yet, Southern Africa, together with Western Asia, still has the lowest proportion of female migrants of any major region in the world (Lucas 2005b).
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 influencing different types of migration and destination (i.e. permanent or temporary migration, Greece or Italy).

The real challenge of research on migration, though, is to answer how the ‘development’ impact of migration affects farm households’ ability to achieve sustainable living standards and a better management of agricultural resources at origin. In order to make such a contribution, it seems that a methodological effort has to be put in overcoming the tendency to focus on only one dimension of migration in isolation with all others - particularly the dominant view of migrants as one-off individual decisions makers, the need to account for the multi-facets of the migration process, and the need to focus on the continuing links between the migrants and their areas of origin (Lucas, 2005; McDowell and de Haan 2003). A number of empirical studies, for example, focus on the impact of remittances only (e.g. Banerjee, B.1984; Lucas and Stark, 1985, Rempel and Lobdell, 1978). Even though they present econometric estimates of their effects in migration-sending developing areas, few take into consideration the self-selectivity of migration when estimating remittance functions (exceptions include Hodinnot, 1994; Taylor, 1987). As the NELM approach emphasises, the impacts of migration are intimately tied to migration determinants, including the incentive to migrate and the selectivity of migration (Lucas, 2005; Stark 1991).

It has be noted, though, that systematic analyses and empirical research are hampered by a lack of micro data sets containing information on the array of variables required to estimate migration impacts, within neoclassical and especially NELM migration theoretical framework. In particular there is a lack of instruments to sort out the endogeneity problem caused by the migration selectivity, and thereby to determine the direction of causality between migration and household well-being (in terms of both income and assets position). Yet, some empirical studies we review below offer a basis to reliably glean some insights into the migration-development nexus in rural developing areas.

The major impacts of migration and remittances on source rural areas occur directly through changes in the patterns of expenditure and investments of households having migrant members, and indirectly through multiplier effects and changes in the labour market at meso and macro-level. In Chart 1 we summarize the main conceptual linkages between migration and its impact at origin.

**Direct effects on migrant-sending households**

The existing empirical works offer competing views on the role of migration and remittances in shaping consumption and asset accumulation in source households at origin.

Mines and de Janvry (1982) have studied migrant flows to US from one Mexican village and they find that return migrants do not invest their earnings in productive activities, but they view the village as a place to raise children and to rest. Durand et al. (1996) and Taylor et al. (1996) have shown that Mexican migrants are more likely to make investments in housing rather than in activities that increase household production. More recently De Brauw and Rozelle (2003) have tested whether or not migration leads to productive or consumptive investments (where the former are investments in agricultural and non-agricultural activities and the latter are investments that directly improve the quality of life for members of the households, such as housing and durable goods). Using household data collected by the authors in rural China in 2000, they find that in poorer areas migration increases consumptive investments by nearly 20 percent. They also find no evidence of a link between migration and productive investments.

In contrast, a number of empirical works find evidence that participation in migration foster household farm investments in sending regions. In the NELM perspective, this is a significant test of the hypothesis that having a migrant member working elsewhere loosens risk and liquidity constraints on household productive investments at origin (Stark and Levhari, 1982; Rosenzweig and Stark, 1989). In the context of mine labour migration to South Africa, Lucas (1987) estimates a positive effect of remittances from foreign workers upon cattle accumulation and on crop productivity in the principal recruiting nations. In a different context, Dustmann and Kirchkamp

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4 More specifically, Lucas (1987) shows that migrant withdrawal to the South African mines, from several countries in southern Africa, diminished crop output in migrant-sending households in the short run. However, the accumulated earnings of migrant mine workers, subsequently increased both crop output and cattle herd size significantly.
(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 and communities that migrants leave. They measure the competing migration effects and they find that the loss of labour to migration has a negative effect on household cropping income in source areas, although it does not negatively affect crop yields. Yet, they provide evidence that the remittances sent home by migrants partially compensate for this lost-labour effect, contributing to household incomes directly and also indirectly by stimulating crop production. Similarly, Rozelle et al. (1999) have shown the growth potential of migration in rural Chinese contexts of capital market imperfections, whereby remittances accumulated abroad compensate for labour loss and allow households to improve their agricultural productivity (i.e. maize yields). In a recent work on rural out-migration experiences in Bangladeshi farm households, Mendola (2005) looks at migration effects on productive activities at origin by simultaneously estimating the household decision whether to employ a new agricultural technology and whether to have a temporary domestic, permanent domestic or international migrant member. She finds that international migration is complementary to the adoption of modern farming technologies, whereas both temporary and permanent internal migrations result to compete with productive enhancements in farm households left behind.

Overall, the perspective that remittances tend to be used for household consumption rather than investments increasing agricultural productivity is questioned by empirical evidence and results can be non-monotonic depending on various migration forms. However, a clear distinction between investment and consumption may be difficult to maintain in the context of the use of remittances. A common use of remittances, for example, is to pay for education of the next generation and that does not appear to be a clear investment strategy in the short-run, although it may be in the long run. In a recent study on Guatemala, for example, Adams (2005) finds that households receiving remittances actually spend less at the margin on consumption and tend to spend a larger amount of remittance on investment goods, in particular education and housing. Furthermore, expenditure on house construction through remittances can stimulate local building enterprises, growing demands for services and boosting labour demand (see following section).

Ultimately, it is worth noting that remittances may have potential costs for migrant-sending households, largely believed as deriving from moral hazard problems (Azam and Gubert 2004). It has been argued that if migrant work is lucrative enough household members remaining behind may entirely forgo productive activities and live primarily on remittances receipts (see also Gubert, F 2000 on Western Mali; and Gemenji and Swinnen 2004 on Albania). On the other hand, though, people left behind may invest more so as to motivate the migrant to send more remittances (de Janvrь et al., 1992). Clearly this is an open debate and more research has to be conducted.

**Indirect effects at meso and macro-level**

Within migrant sending-communities, there are important indirect effects that spread from migrants to nonmigrant households. Expenditure and income linkages transmit impacts of migration and policy changes at village-level in sending regions, creating the ‘remittance multipliers’ on local incomes, labour and employment. Migration may also influence rural production and expenditures by altering the prices of local goods and factors (nontradables) and migrants may encourage investments in their area of origin by others through demand-side spillovers (Lucas 2005). Of course, the number and distribution of migrants in the population or the amount and dispersion of remittances will influence the extent to which the impacts of migration are transmitted beyond migrant households into the local economy.

Evidence that remittances may indeed have served to accelerate investment and economic growth in local economies is found for some regions such as Pakistan, India, Mediterranean countries and Eastern Europe (Azam, 1991; Glytsos, 2002; León-Ledesma and Piracha, 2001; see also WB 2003). A few village-level works have shown that remittances produce significant multiplier effects on migration-sending economies and these effects are particularly important for rural areas in the case of international migration.
severe brain drain (to the US in his data) mostly argument). Lucas (2004) shows evidence of departure of skill migrants (the ‘brain drain’ level is the loss of human capital derived from the 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’ argument). Lucas (2004) shows evidence of severe brain drain (to the US in his data) mostly in low-income countries and an important degree of heterogeneity across regions and countries5. Furthermore, Faini (2003 and 2005) finds considerable evidence that skilled migrants have lower propensity to remit and thereby the brain drain is associated with a smaller flow of remittances. On the other hand, there is also the possibility that migration encourages more skill creation (‘brain gain’) than that which is lost with migration, i.e. the net impact may be positive for sending countries. Remittances, for example, may buy schooling, which may offset some of the human capital loss (empirical work by Hanson (2002) finds that children in households of migrants received 0.7 to 1.6 years of schooling more on average; in the same spirit, Cox, Edwards and Ureta (2003) find that remittances contribute to lowering the hazard of leaving school in El Salvador). Overall, the human capital consequences of migration may result in significant externalities in terms of productivity and growth at local and country level, but they also depend on the extent of substitutions between factors and on the local labour market conditions (Lucas 2005b).

Indeed, a major question is the response of the domestic labour market to rural out-migration, which is surprisingly under-investigated in the migration literature. This is an important aspect, though, in that if emigration tightens domestic labour markets this may reduce further departure pressures, perhaps ultimately generating a self-limiting process (Lucas, 2005). In a seminal work on the South African context, Lucas (1987) found a positive effect of mine labour migration to South Africa on wages in both Malawi and Mozambique. In particular, centralization of recruiting played an important role in keeping down labour costs by not bidding up wages through over-recruitment, precisely because migration streams proved responsive to wage differentials.

Male-dominated (international) migration has raised particular concerns with respect to feminisation of agricultural labour and poverty among female-headed households left at home. In Africa, for example, Agesa and Kim (2001) find that rural-to-urban migration in Kenya is more likely to split the family geographically, rather than resulting in family migration, when the number of dependent children at home is larger:

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5 The literature on the brain drain is vast and controversial but effects on rural development at origin remain still devoid of evidence in most of agricultural migrant-sending contexts. Overall, it has been argued that in Asia skilled migration is not a problem despite the fact that many skilled migrants leave their countries. In Africa though, where the share of skilled population is smaller, the departure of the most skilled can be a great impediment (see Lucas, 2005b)
meet contingencies or increase disposable income and seasonal income fluctuations, earn extra cash to temporary migration, both domestic and multidisciplinary micro-studies, show that on it. Yet, a large and growing number of regions (e.g. Haberfeld et al. 1999 on India).

There are no precise information and official data 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.

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, helping 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).

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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). However such works do not enable us definitively to distinguish between whether migrants are better off because they have a long history of migration or migrate because they are better off. So much is context-specific and also depends on the initial distribution and relative wealth status of households. Moreover, it should be studied within a dynamic framework and conceptualised as a migration cycle.

Many works point to an increase of inequalities between migrants and non-migrant households. There are several mechanisms by which this happens. Opportunities to migrate are biased against those without social contacts and at least minimum resources (Milanovic, 1987; Breman, 1996; see also above).

In the case of Mexican studies, the dynamics reported are more about how migration remittances exacerbate inequalities, with migrants becoming better off than others of similar class backgrounds, than about the unequal opportunities for migration among poor people, although this is also analysed (Stark, Taylor and Yitzhaki, 1986; Mines and Massey, 1985; Durand and Massey, 1992, Wiggins et al. 1999). In different contexts, such as Egypt and Pakistan, Adams (1989 and 1992) points out that remittances are substitute to home production and predicts what income would have been without remittances. He then finds that the inclusion of remittances from abroad worsens inequality in three villages in Egypt, whereas remittances result to have an essentially neutral impact on the rural income distribution in four sampled districts in Pakistan. Following the same approach with data from 3 neighbourhoods in Bluefields, Nicaragua, Barham and Boucher (1998) show that treating remittances as exogenous would lead to the conclusion that remittances reduce income inequality, whereas treating them as a substitute for home earnings results in remittances increasing inequality. Studying remittances from Lesotho’s mine workers in South Africa, Gustafsson and Negatu (1993) note that many of these mine workers are drawn from families that would otherwise be poor, and then they conclude that income inequality in Lesotho is reduced by migration. In a recent paper McKenzie and Rapoport (2004) argue that wealth has a non-linear effect on migration and then examine the empirical evidence for an inverse U-shaped relationship between emigration and inequality in rural sending communities in Mexico. They find that the overall impact of migration is to reduce inequality across communities with relatively high-levels of past migration. They also find some suggestive evidence for an inverse U-shaped relationship among communities with a wider range of migration experiences (where higher experience entails decreasing inequality). Their methodology allows for analysis of the overall impact of migration on inequality. The latter includes the direct effect of remittances and the spillover effects of remittances on own production and household labour supply. However, it also includes the network effects of migration on the costs and benefits of migration for other community members, multiplier effects of remittances through their spending on products and services produced by other community members, and other potential spillover and general equilibrium effects. The work of McKenzie...
and Rapoport (2004) seems to be the only one in the literature stressing the need to include indirect effects in studying the migration-inequality 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. However, villagers who have 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 deprivation’ argument). Accordingly, there is the need to distinguish between different typologies of migration, systematically studying international migration along with temporary, domestic rural out-flows and migrant returns. Temporary migrants in developing rural areas have been often considered as employed in off-farm activities, without disentangling specific features of migrant and non-migrant labourers. Most developing countries, though, experience both temporary and permanent forms of migration, sometimes in sequence, often involving the same households or individuals. Moreover, the element of return of migrants is a key socio-economic effect on those who remain at home. Mapping out various types of movement, and studying them in a simultaneous framework, can improve our understanding of the potential virtuous or adverse impacts of migration on rural development in local communities.

Identifying the conditions which stimulate the productive use of (temporary and permanent) remittances is a further research step. Keeping in mind that migration does not always mean economic abandoning, examples of productive investments of (temporary and permanent) remittances in rural areas should be studied to understand where and how this has occurred. Key components in such studies are (i) the nature of substitution or complementarity among productive inputs; (ii) changes in the technology involved; (iii) domestic government policies, which may be vital in linking migration to productive investments (and ultimately development).

Another important aspect of labour mobility is related to better understanding the potential brain drain or skill acquisition of circular rural migration.
This is important as skilled migrants may influence productivity of others, economic growth and directly contribute in the delivery of specific services or skills in the agricultural sector. In particular, more insights into whether skilled migrants return to the community of origin or uses migration returns (in terms of both human and financial assets) to move to urban areas are needed, as there are substantial implications for the development of rural areas at origin.

Migration impact on labour-market at origin has been identified as a major knowledge gap in the migration literature (Lucas 2005). Indeed, people out-flows entail reduced labour supply and, given migration selectivity, a loss of working age adults (both male and female). This may be a cost in first place for most families who depend largely upon labour income for their livelihood, and more in general for the whole economy in terms of employment and wage responses. If migration tightens or loosens domestic labour markets is an open question along with the concern about the distribution of potential wage swells between skilled and unskilled, urban or rural labourers.

Moreover, the impact of rural out-migration on source economies depends on the how integrated are internal and international labour market, local production markets and international trade (Lucas, 2005). Mass departure of agricultural labourers from one region may induce movement to or from neighbouring areas. Moreover, adjustments in agricultural production patterns induced by migration depend on the degree of openness of the economy to international trade. The information derived from further studies on these cross-market effects can be used to identify appropriate complementary interventions.

Eventually, the structural role of migration and remittances in some specific contexts can make sending areas to depend largely upon remittances (in the sense that the latter would ultimately compete or substitute for local production). For example, strong migration ties with other labour markets (e.g. Mexico-US) or geographical proximity and long migration history (e.g. Albania or Morocco) may enhance confidence in the continuation in this source of income at household level. Yet, this same process could reduce the supply response of local economies to policy changes (as market liberalization unfolds) and lead to an impoverishment process in sending regions. Moreover, if this confidence is not balanced by domestic governments’ efforts to facilitate remittance investments and to create complementary policy interventions, especially in the agricultural sector, migration may entail a net-loss for source regions. Comparative analyses between major migrant exporting countries (and major receiving countries which present different migration policies) would be an interesting testing ground to study cumulative migration from rural areas and its potential drawbacks.

Migration is a complex phenomenon and given the new challenges posed by a ‘globalised’ and rapidly changing world, drawing lessons from the mass migration of the past century is not an easy task either. One lesson we can draw from the existing migration literature is that a major feature of the current ‘mass migration’ process - besides the creation of high barriers to it - is its strong linkage to countries of origin. Migrants seem to belong to spatially extended families and communities and they play a crucial role in helping or hindering the social and economic development in their home countries. This motivates further research aiming at a better understanding of the migration-development nexus, both when migrants intend to go back home and when they deepen their integration in the host country.
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Chart 1: The linkages between labour migration and economic development at origin
# Annex 2

## Table 1

**Impact of Migration and Remittances on ...**

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<th>Housing expenses</th>
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