

Remittances and sustainability of family livelihoods in Zimbabwe: Case Study of Chegutu Town

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Abstract

Zimbabwe had witnessed socio-economic challenges that resulted in mass exodus of its populace across its borders mainly from the late 1990s. Migration can be individual or household strategy for survival and remittances play a role in transforming the household income. Making use of ordinary least squares estimation techniques, this article examines the impact of international remittances on sustainability of family livelihood in small mining town of Chegutu located in Mashonaland West Province of Zimbabwe using survey data. I found out that remittances go a long way in providing income for basic services like municipal services, food, medical expenses and disturbingly to a lesser extent education.

Key Words: consumption, households, international migration, remittances, Economics of labour migration

JEL Classifications: D100, D120, F220, F240

1 Introduction and Background

Across literature and the policy arena it is increasingly recognised that migrants provide an invaluable resource for development and poverty reduction in their home countries. Some people choose to migrate; others are forced to do so by natural disasters, economic hardships or conflicts. Migration, all over, has often been viewed as a “brain drain” rather than an opportunity, (Ratha, Mahopatra & Ozden, et al., 2011), despite acknowledgement of the possible resource support to the families left behind by emigrants.

In reflection to such belief, policies have often tended to ignore migration, or have had the implicit or explicit aim to reduce it. Resultantly, the trend has been to consider migration as undesirable and problematic in academic, press and policy debates, (Samal, 2006). The implication of this is to ignore

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the vital livelihood activity of the migrants and further worsen their plight by depriving them of the chance to emancipate from poverty trap. This emanates from some arguments that, migrants often play an active role in the political debate and civil society in countries of origin, (Nyberg-Sorensen et al 2002; Van Hear 2004), despite others having argued that their role might be overstated as many case studies focused on the minority of truly transnationally active migrants, (Guarnizo, et al 2003).

For Zimbabwe, it has been noted that it resulted in making remitting very costly and risky due to drastic measures put in place to drain the little that is sent home by emigrants (PASOP, 2012). Little understanding of the role played by remittances in reducing pressure on government social assistance and more so in sustaining family livelihoods by policy makers is worrisome. Surprisingly, it is evident that in 2004, an increase in foreign currency reserves in Zimbabwe was ascribed, in a larger extent, to the introduction of a new money transfer system (Homelink) set up by the government to facilitate formal transfers (RBZ, 2005).

International migration has the potential to generate considerable welfare gains for migrants, as well as countries of origin and destination, and alleviate poverty. However it is only recent that household surveys have begun to capture characteristics of households that have a member living in another country (Ratha, et al. 2012). This study seeks to analyse the effect of remittances on sustaining family livelihood in Zimbabwe using a case study of Chegutu, a small mining town that had suffered a major economic shock.

At the backdrop of the contradiction of theory and practice, Zimbabwe, specifically Chegutu town, provides a natural experiment set-up to assess the effect of remittances on sustainability of family livelihoods. Chegutu town faced a great economic shock of the closure of the giant mining accompany, which was the economic mainstay. Furthermore, Zimbabwe, at a macro scale has been riddled with vast economic challenges pointing to a meltdown. Can remittances make a difference in such a community? To what extent can remittances be used to sustain family livelihood in the face of such constraints? These are the questions the study attempted to answer.

Zimbabwe experienced a dramatic turn in economic fortunes since 1999. The reasons to this are varied and many have pointed out international economic sanctions, sabotage and uneconomical policy mix, land acquisition, among many others. According to Ncube and Houggard (2010), since year 2000, the economic deterioration and political situation in Zimbabwe saw the number of migrants rise exponentially. It is estimated that there are between two and three million Zimbabweans that live and work in South Africa alone, (Kerzner, 2009). Could such an exodus have helped to mitigate an ultimate meltdown of the economy through remittances?

In line with this, the current study is aimed at articulating the role remittances play at micro level in sustaining family livelihoods, with roles at meso and macro level left for future studies. Following this introduction and background is section 2 on Literature review; section 3 presents the empirical analysis methodology, techniques and results, while section 4 presents conclusions and

policy recommendations.

2 Literature review

2.1 Migration and Remittance flows

Remittances come due to migration and in literature there is a general view that such remittances positively impact economic growth through poverty alleviation in migrant sending countries, (Adams & Page 2005; Bracking and Sachikonye 2010). On the other hand remittance flows are understood by most contemporary researchers to be counter-cyclical, mitigating the impact of adverse shocks, (Freud & Spatafora, 2005). They are considered exogenous flows that add to pre-existing home earnings (Adams 1994; Zhu & Luo, 2010). The sudden closure of Broken Hill Proprietary (BHP), as mainstay for the town's economy and surrounding communities was a great adverse shock. Given down-trending economic fortunes at macro level in the economy during that time, majority of the citizens had to leave for other countries and thus making international remittances a possible significant factor in sustainable livelihood in the community. Adams and Page (2005), strongly tie poverty alleviation to remittances. Remittances are therefore posed to significantly reduce the level, depth and severity of poverty in developing countries from a household level.

Migration can have a direct effect on poor peoples' livelihoods, becoming a focal point in the ongoing debate concerning the viability and sustainability of this livelihood option, (Nyberg-Sorenson et al 2002; Samal, 2006). Migration can also act as a social security mechanism for poor households for households who experienced a shock or, as in this case study, a sudden loss of employment in an economy that had dived into a persistent downward trend in all spheres.

Unlike aid, remittances flow directly to individual households and as well unlike loans they incur no debt. Their impact therefore can be instantaneous and usage very cheap making it easier for those facing financial constraints on migrating due to lack of unemployment able to timeously resuscitate household financial wellbeing at minimum costs. Besides contributing to consumption in the short term, remittances can foster longer-term development through investment in education, land and small businesses.

The economics literature identifies a number of explanations for migration at the individual or household level. Firstly neoclassical micro-economics defines migration as an individual strategy for own income maximization (individualistic behaviour contrary to altruistic tendencies). Given differences in earnings potentials, proxied by human capital, individuals migrate when the expected gain from migrating to a destination is greater than that from staying in the origin, (Todaro, 1969). In such context remittances do not form part of the overall aim of migration, and hence can be assumed to be minimal or near zero.

On the other hand, this individualistic view of migration behavior has been challenged by household theories of migration, which suggest that migration is a household strategy for income maximization, (Garip, 2007). New Economics

of Labor Migration (NELM) suggests that households send migrants to improve income in absolute terms, as well as to increase their relative income, and to reduce their relative deprivation with respect to some reference group, like the community or past status, (Stark and Bloom 1985). In new economics of migration the emphasis is on the family and family strategies as crucial elements in migration decisions. It follows that, when household income levels drop, for example due to loss of employment that occurred in this predominantly mining town, a consensus on who can migrate may be reached at household level- taking into account the consequences of the separation in a cost-benefit analysis framework.

In essence, it can be argued that families saw migration as a form of portfolio diversification in which remittances thus can be a great positive outcome. The household, initially invest in migrants leaving, doing so in the expectation of returns in the form of remittances. Thus, according to the works of Samal (2006), migration is also undertaken as a survival strategy in which the temporary or long-term migration of people from a household is seen as a way for the household to maximize its chances for survival in an uncertain environment by diversifying its sources of income.

Garip (2007) asserts that as one moves from individual to household theories of migration, the issue of remittances arises naturally. Unequivocally, if individuals were to migrate to increase their own income, as neoclassical microeconomics suggests, then they are not expected to send remittances. If, on the other hand, individuals migrate to improve household position as the NELM theory suggests, then they are expected to maintain their linkages and send at least part of their earnings as remittances to their households. The economic conditions in the community, specifically that of Kaguvi Township housing former BHP workers, meant that individuals migrate to restore household economic position, implying therefore remittances are key as suggested by the latter theory.

In line with NELM and livelihood approaches, a number of empirical works supports the view that labour migration, besides being a response to destitution or abject poverty (Hampshire, 2002), is a livelihood strategy pursued by social groups, notably households. This will be in reaction to relative deprivation in order to spread livelihood risks, secure and increase income and acquire investment capital, (Quinn, 2006. It is reasonable enough to say remittances are central elements of such household strategies to overcome sustainability constraints in this locality.

The NELM has plausible theoretic link with livelihood strategies and hence can assist in understanding the impact of remittances on sustainability of family livelihood. According to Carney (1998), livelihood comprises the capabilities, assets (material and social resources), and activities required for a means of living. Furthermore, a livelihood encompasses not only the households' income generating activities, but also the social institutions, intra-household relations, and mechanisms of access to resources through the life cycle (Ellis, 1998). In that context migration can be viewed as a livelihood strategy, which De Hass (2008) defined as a strategic or deliberate choice of a combination of activities by

households and their individual members to maintain, secure, and improve their livelihoods through increasing and diversifying the financial assets portfolio. From an empirical stand point, De Hass (2008) further refutes the individualist self-maximizing behaviour of migration and supports the household portfolio diversification, and thus gives insight into the basis of migration in Chegutu on the grounds of economic hardships of the time.

Hence, in line with the NELM and livelihood approaches, the central view is that migration is a deliberate attempt by social groups (typically, but not exclusively, households) to spread income risks, to improve their social and economic status and, hence, to overcome local development constraints. Across literature, international remittances generally help to diversify and also to substantially raise household income. They have a crucial insurance function in protecting people from destabilizing the effects of absent or ill functioning markets, failing state policies and a lack of state-provided social security. Garip (2007) found out that altruism and insurance seeking influence both migration and remittance probability, concluding that migration and remittances are related processes.

The majority of the existing studies, which focus on the impact of migration on household members left behind, have shown positive impact in both the short run and long run.

2.2 Remittances and Sustainable livelihood

In literature, there has been disagreement about the relationship between poverty and migration, which leads one to assume that the correlation is likely to be context-dependent. Migrant remittances help smooth household consumption and act as a form of insurance for households facing shocks to their income and livelihood caused by drought, famine, loss of employment and other natural disasters.

Ratha et al (2011) noted that household surveys in Africa show that remittance-receiving households have greater access to secondary and tertiary education, health services, information and communication technology, and banking than households that do not receive remittances. This study had a closer look at the impact of remittances on the ability to access a number of basic services, which was evidently non reachable by the households after the economic quagmire.

Nonetheless, remittances can reduce the level of poverty by directly augmenting the incomes of poor recipient households and increasing aggregate demand, thereby increasing employment opportunities and wages of the poor. Remittances have reduced the share of poor people in the population in other single country studies (Studies of Burkina Faso (Wouterse 2010); Ghana (Quartey & Blankson 2004; Adams, Cueuruecha, & Page 2008a); Lesotho (Gustafsson & Makonnen 1993); Morocco (Sorensen 2004); Nigeria (Odozia, Awoyemia, & Omonona 2010). On the other hand, Shroff (2009) asserts that impact of remittances on poverty in a particular year depends on the amount of the remittances. This resonates to the studies Yang and Martinez (2005); by Adams and Page (2005) and Hoti (2009). Such findings would be expected to be accompanied

by policies that support remittances, through reducing transaction costs for example, however as noted above it was to the contrary in Zimbabwe.

Usually it is difficult to identify the share of remittances devoted to specific uses, as money is fungible- which means that it is generally not possible to “ earmark” migrant remittances to specific expenditures (Taylor 1999). A micro survey will help identify the major expenditure financed from remittances and this study was aimed at contributing on such. Evidence from other regions suggests that a significant part of remittances is spent on housing investment and the purchase of land, particularly where few other assets are reliable stores of value. The household surveys conducted by Plaza et al (2011) as part of the Africa Migration Project find that a significant portion of international remittances are spent on land purchases, building a house, business, improving a farm, agricultural equipment, and other investments.

With countless families reliant on remittance inflows as a source of income maintaining their economic livelihood, a reduction would put many at risk of falling below or deeper into poverty (Loschmann, 2009). Recognizing the importance of remittance inflows as a lifeline to the poor, policy should aim to (1) reduce the barriers to remit in both sending and receiving nations thus easing the decline in transfers; (2) leverage the development impacts of remittances.

As migration enables households to diversify their sources of income and thus reduce their vulnerability to risks, efforts must be put on creating an enabling environment for such flows. In Ecuador, remittances helped keep children of remittance-receiving households in school when faced with adverse shocks (Calero, Bedi, & Sparrow 2008). Increased remittances helped smooth household consumption and compensate for the loss of assets after an earthquake in El Salvador in 2001 (Halliday, 2006). Transfers from friends and relatives in the United States played an important role in reducing the distress caused in Haiti by Cyclone Jeane in 2004 (Weiss- Fagan 2006) and after the devastating earthquake in 2010 (Ratha, 2011). Migration and remittances have been a part of surviving mechanisms embraced by African households facing shocks on incomes and livelihoods.

Gupta et al. (2009) found that remittances, which are a stable, private transfer, have a direct poverty mitigating effect, and promote financial development. These findings hold even after factoring in the reverse causality between remittances, poverty and financial development. The paper posits that formalizing such flows can serve as an effective access point for “unbanked” individuals and households, and that the effective use of such flows can mitigate the costs of skilled out-migration in SSA.

Kiiru (2010) highlighted that domestic and international migration has become a strategy for individuals and families in developing countries to cope with poverty and economic crisis. Migrants attempt not only to improve their own livelihoods but they also send a considerable share of their earnings to their families in the region of origin.

2.3 Remittances and poverty alleviation in Zimbabwe

Despite the unreliability of informal remittance methods, a study by a South African rights group revealed that Zimbabweans in South Africa were sending home up to US\$900 million dollars annually. However, this money is largely sent through informal means (PASSOP, 2012). The study revealed that of an estimated three million Zimbabweans, 90% sent money home regularly, sending an average of a third of their incomes. These findings are higher than those from most other remittance corridors in various parts of the world, which underscores the depth of the current dependence on remittances in Zimbabwe.

On the other hand, Finmark Trust (2012) found that Zimbabwean migrants are the largest remitters, as measured by the frequency and value of remittances. Furthermore, Democratic Republic of Congo (DRC) was reported to have the fewest remittances by value sent, due to the high transaction costs of remitting funds which also affected the frequency of remittances.

The findings highlights not only the importance remittances currently have in supporting livelihoods, but also their effect on the Zimbabwean economy, being one of the most important sources of foreign currency inflows. The economy is running on multicurrency monetary policy setup. The latest figures by PASSOP (2012) indicate a huge jump in the amounts being remitted to Zimbabwe as in 2010 the World Bank had put the figure at between US\$360 and US\$490 million. Probably to reflect the variance between informal and formal remittances, the Reserve Bank of Zimbabwe in January 2011 said repatriations accounted for US\$263.3 million.

The 2003 Poverty Assessment Study Survey II on Zimbabwe showed a substantial increase in poverty; between 1990 and 2003, from 25 per cent to 63 per cent. Households are relying increasingly on remittances and emergency aid. If the hypothesis of positive impact of remittances on family social and economic wellbeing holds, there is room to leverage development through such resources.

Bracking and Sachikonye (2006) found out that a full 50 per cent of urban households in Harare and Bulawayo, Zimbabwe; depend on migrant remittances for everyday consumables.

While there is a consensus that remittance flows to Africa are increasing, little attention has been paid to the impact of these transfers on poverty alleviation, primarily because of data deficiencies at the household level. Oucho (1990) noted that remittances to Zimbabwe have increased over the years, albeit through unofficial sources.

Although most international remittances do not flow directly to the poorest people, remittances often make up an important share of the income of poor people and poor communities. The poorest may face financial constraints when deciding to migrate hence fail to send a family member abroad. However, they can provide casual labour to households with members abroad and earn an income. Furthermore the investment by those with family members abroad that included house dwelling extension provide opportunities for employment, albeit piecemeal in most instances.

3 Empirical Analysis

To avoid weaknesses in generalization, this study considered a micro level analysis of the role played by remittances using primary data. This also helped to overcome the measurement problems noted in Bracking and Sachikonye (2006) associated with accounting for remittances as informal transfer channels are now being used significantly. Studying how remittances increase household income; households use remittances and the developmental impact of these uses at the micro level is riddled with methodological difficulties.

From economic modeling perspective it is ideal to measure how remittances contribute to total household income by decomposing total household income and studying the distribution of each source of income and its contribution to sustainability of livelihood. It is possible to take remittances as exogenous transfers that add to pre-existing home earnings other than an alternative choice. Unlike in Kimhi,(1994) and Escobal, (2001) there is no substitutability between participation in immigration and home productive activities due to non-existence of the later given the nature of the economy of Chegutu town and nation-wide socio-economic status quo.

3.1 The Study Area, Population and Sample

Chegutu is a small predominantly mining and farming town (ranked 13th by population size) in Mashonaland West province of Zimbabwe. It is situated about 100km South West of the capital Harare. According to City Population (2012), the population of Chegutu grew exponentially from 19606 in 1982 to 30191 then 43424 in 1992 and 2002 respectively (see Figure A2 in appendices). Chegutu is one of the towns in Zimbabwe that grew by over 40 percent in the 1992-2001 decade alongside Bindura and Victoria Falls. In Chegutu, a significant increase was experienced during the advent of BHP minerals in 1995. BHP minerals changed the face of Chegutu from different angles: population dynamics; infrastructure (housing, roads, schools, shopping centers); income levels; business activities. Lack of industry diversity makes the population more vulnerable to any economic shock on the town- the closure of BHP, was such a shock. This study selectively focuses on the former BHP employees as the target population who were provided with housing units during their tenure at the platinum mine.

BHP built houses for its workers and therefore it was easy to identify the population: the houses of former BHP employees. However, it was noticed that some change of ownership had transpired over the years and therefore in identifying a sample- a house now owned by a non-former BHP employee was skipped (that is convenience and purposive sampling techniques were applied).

The structure of the housing units and clear numbering allowed use of simple random followed by systematic random sampling techniques to identify the household to distribute the questionnaire. Paper pieces with the first 100 dwelling units' house numbers were tossed in a hat and one picked at random. This gave the first household to be visited and thereafter the tenth house from

the one picked initially and so on had a questionnaire administered. In this process 200 houses were selected for the study.

A household was recognized as the most relevant social group and hence the most appropriate unit of analysis, acknowledging that the forms of households vary across time, space, and socio-economic groups (McDowell & de Haan 1997). Unlike in Adams (1989) where the focus was on asking the emigrants themselves on the uses of remittances, this study considers the remittance uses as informed by the recipients.

Self-administered questionnaires were distributed to a conveniently selected sample between November and December 2011. Given the understanding of the rich information in qualitative information, open spaces were provided in the questionnaire to allow room for additional information.

3.2 Analytical Framework

Analysing the impact on livelihood is not straightforward as the variable depends heavily on context and measurement challenges. This study adopted the framework suggested by International Fund for Agricultural Development (IFAD), as outlined in Figure A3. The Sustainable Livelihoods approach favoured by Department for International Development (DFID), United Kingdom, defines livelihoods as ‘the capabilities, assets (including both material and social resources) and activities required for a means of living’, (Carney 1998).

In the framework, there are a set of five assets, which interplay to provide a sustainable livelihood outcome. The interconnectedness of the assets forms a web that assist in sustaining individual/family livelihood. The variable of interest in this study is remittances, an asset under Financial Capital (F) which can be argued as significant if other forms of financial assets (past savings, credit/debt, pensions and wages) are insignificant or non-existent as in the context of this study. The NELM postulates how migration is used as a strategy to overcome barriers to credit and capital through remittances substituting for missing markets and providing a form of social protection.

Given the economic status quo of the population it is reasonable to assume that amounts of other forms of financial assets are not different from zero (illiquidity in the financial system, high inflationary challenges; loss of employment among many other restrains to savings). Intuitively, migration is not an alternative but the only option given that there is lack of economic opportunity in the sending community.

Financial capital act as the lubricant in accessing all other forms of assets, without which access and usage will be direly limited. It is imperative to also note here, that different households can have different access to livelihood assets and thus livelihoods are affected by the diversity of assets; amount of assets; balance among asset holdings.

The process is however not a sure bet, it is poised to be exposed to forces (vulnerability context) through shocks, seasonality, trends and changes; how to cope with these forces and adapting is the key to sustainable livelihood. In this study, if remittances have the ability to help adapt or resist one of these

shocks, then they have role to play in sustaining family livelihood. The target population in this study had no wages, had limited chances of accessing credit given lack of income; pension and savings even if available were exposed to macroeconomic uncertainties that were gripping the whole country.

Faced with such a situation, households have to device strategies of obtaining financial capital that would make their livelihood financially liquid. In the perspective of ensuing debate on the vulnerability of the households in Kaguvi Township, remittances presented themselves as the panacea – however one has to migrate in order to have remittances. Remittances were therefore supposedly absorbing the shocks; resist/ reverse the trends and changes in order to be meaningful in the sustainable livelihood framework.

Besides the macroeconomic uncertainties presenting vulnerability threats to sustainable livelihood, policies, institutions and processes also play a significant role in determining the successful impact of all the different kind of assets. In the context of where assets are from abroad (remittances) the institution plays a critical role in enabling or stumble the smooth transfer.

Households employ strategies in combining the assets they can access, given the vulnerability faced, the support or lack of it from policies, institutions and processes to get the best outcome- poverty eradication. A good example of institutional frameworks to support remittances in Zimbabwe is the Homelink, which was a vehicle designed to lure diasporans to remit and investing back home. Other possible institutional frameworks may include the flexibility, reliability and affordability of formal financial services to allow easy transfer of remittances across borders. Many Zimbabweans have resorted to informal means due to the institutional rigidities and lack of transparency in the system, (PASSOP, 2012).

3.3 Model specification

In light of the Sustainable Livelihood framework, I analyzed the impact of remittances on household income and articulate the first order effects of remittance income on household expenditure. Adopted from Adams (1994) the economic model of remittances takes the form:

$$Income \text{ (excluding remittances)} = f(\text{dwelling size, males over 16 in household}) \quad (1)$$

$$Income \text{ (excluding remittances)} = f(\text{dwelling size, males over 16 in household, migration dummy}) \quad (2)$$

And to analyze the economic uses of remittances. . . :

$$\frac{Consumption}{expenditure} = f(\text{expenditure, household size, migration dummy}) \quad (3)$$

3.3.1 Variables description

Remittances: Simply defined, remittances are transfers of money, goods and diverse traits by migrants or migrant groups back to their countries of origin or

citizenship; all measured in monetary terms.

Dwelling size (dwe_sz): this is the size of the house in terms of bedrooms count. This variable is crucial as the variation in dwelling size shows variations in livelihoods post BHP minerals as the mining company provided standard four, two and one bedroomed dwellings for its workers in Kaguvi.

Household size (hhsz): the number of individuals in a household who generally share a meal together for at least the past three weeks

Males over 16 years old (male_16): this variable captures males in a household of working age (as well as school completing age)

Migration dummy (mig_): capturing whether the household has a member who migrated or not (1 for Yes, 0 otherwise).

Consumption_i: the value of consumption by the i^{th} household

Expenditure: value of total expenditure for the household.

As in Adams (1991), the dependent variable is expressed in per capita terms to allow household comparisons. A ratio is opted in order to ensure that the slope is free to change with expenditure and allows rising, falling and constancy in marginal propensity to consume over a broad range of expenditure levels.

Sustainable livelihood

According to Chambers and Conway (1991) livelihood is defined as adequate stocks and flows of food and cash to meet basic needs. In the broadest sense of remittances, it is evident that there is accumulation of food and cash by remittances receiving households. Based on the discussion above, sustainable livelihood is attained when households employ strategies in combining the assets they can access, given the vulnerability faced; the support or lack of it from policies, institutions and processes to obtain a positive outcome. Any factor that positively impact access to assets, reduces vulnerabilities or make policies, institutions and processes better support household efforts, have a chance to improve sustainability of livelihoods.

For long term benefits, households were also asked if they invest part of the remittances in order to grow the income and have the potential to generate more sustainable alternative sources of income.

3.4 Results Analysis and Discussion

3.4.1 First order effects

The dwelling size is on average five rooms which is a great improvement to the average double room per household (BHP provided mainly double rooms and some few single and four roomed houses). From Table 1 comparing income per capita including remittances with one excluding remittances, we observe that, the income including remittances (\$508.28) is on average about 255% more than the one excluding remittances (\$143.03). This signifies the role of remittances in raising income levels.

Focusing on the income variables, there is great variation in income per capita excluding remittances (US\$232 compared to US\$84 of income including

remittances) indicating how remittances help stabilise income flow. Those receiving remittances are likely to have a stable and hence more reliable income which is very crucial in household budgeting (expenditure and savings planning) and hence sustainability of livelihood.

Gender was solicited for the individual remitting, that is, the migrant as this metric is more relevant for that angle in this context given that the focus is on remittance flows, as compared to the gender of the respondent. Based on the gender of family member who had migrated, 72 percent are males supporting the notion that males migrate more than females. However one household did not provide the gender for the migrant.

In addition, the correlation among the variables was tested and results are presented in table below.

As revealed in model one on the determinants of migration, migration variable is highly correlated with dwelling size, male over sixteen within a household and the total household income. Having established the determinants of migration and first order effects of migration on income, I moved on to analyse the effects of remittances on consumption (food consumption, that is expenditure that excludes education, health, municipal services, investment spending) and investment to be able to conclude on the significance of remittances in sustaining family livelihood.

Furthermore, regression analysis (Table 3) revealed that the presents of economically active males in a household (`male_16`) is positively related to migration, the presents of a migrant in a household, (`mig_`), with every additional male over 16 added to the household increasing the chances of a household having a migrant by over 25%.

As most migrants have been entering new territories where there is no certainty on how quickly they start generating income, leaving behind at least one economically active male behind provides some form of livelihood security. The increase in chances to migrate may also be explained by observation that, males migrate more than women; hence the more males are in a household the greater the chances of having at least one migrant. On the other hand, the lower the income excluding remittances (`inc_pc`), the higher the chances of a household to have at least one migrant, at 1% significant levels. The size of the dwelling could not be used in this regression as envisaged early due to fact that data collected revealed a reverse causation. Household size proved to be insignificant as determinant for migration.

Among those variables significant in the analysis, overall household income (`inc_pc_r`) is significantly positively determined by whether there is a migrant in the household or not (`mig_`). Migration therefore is central in improving household income, with a household having at least one migrant having the potential to improve income by about US\$300 per month. Also, the size of the dwelling (`dwe_sz`) increases income pool, this may be due to letting out extra rooms as a viable source of income. Interesting bigger dwelling size is highly correlated with migration status of the household (pointing remittances being used to fund extension of households: basically the housing units were provided by BHP minerals as single, double and quad rooms only, with majority being

doubles). The average dwelling size has been pushed to five by extensions, which is on another hand an indication of investment.

Extending the household unit came top in the kinds of investment through remittances, with 80% of those receiving remittances indicating that their first investment priority is expanding their dwelling given its perceived potential to provide sustainable income. One female respondent noted that “... *you cannot go wrong in investing in a house... people always want to live in towns no matter how hard things are... therefore tenants is never a problem.*”

3.5 Economic uses of Remittances

3.5.1 Household consumption (excluding expenditure of investment, education, health but includes only food consumption)

66 percent of the respondents rely solely on remittances for their day to day needs. Amongst the family members in Zimbabwe, no one is working or self-employed to provide financial support except only member(s) who have moved to another country. This gives great weight to the value of remittances in these families livelihoods and greater possibility to work as poverty reduction strategy.

Quiet disturbing is the result that, only 77% of households relying solely on remittances spend less than 5% of total income on education:- this signifies the dire need for financial support of these households as the little received is spent mainly on health, food and municipal services. When households are faced with income constraints, education is quickly dropped from the priority list viewed as long term investment with returns highly uncertain more so compounded by the economic challenges bedeviling the country. The prioritization by the households is detrimental to their future and those of the children who are failing to access education now. The negative impact of this on the country as a whole needs no emphasis. Households relying solely on remittances spend, on average less on transport as they prefer walking than paying taxi/ bus fare within the locality that one usually needs to take a taxi. To them, transport is not as crucial as food (60% of them), health (85%) and municipal services (93%), (fear of service cut off).

Some 31% of the respondents attest that they also use the income from remittances for holiday, entertainment and other social gatherings reflecting how remittances touch all spheres of a household living.

From the econometric assessment the outcome of descriptive analysis is confirmed that having a migrant in the household increased the amount of food consumption. At 95% confidence levels, a household with a migrant spends about 8% more on consumption than the one with no member out of the country. This reflects how migration contributes to household food consumption possibly through increasing household income as reflected in previous section. In effect, migration explains consumption levels more than even the household size, meaning the availability of income is central to consumption decisions than the number of people sharing the meal. As more is spent by the household (exp) less and less amount is attributable to consumption spending. Intuitively the

excess expenditure amounts could be going towards investment.

From another angle, household consumption is significantly explained by migration variable as well as the household size and total household income.

3.5.2 Investment considerations

Not surprisingly, households with alternative sources of income consider investing remittances (73% have actually once invested). They invested more than those who solely rely on remittances for survival (90% invest at least 25% of the income as compared to only 12% from the households solely relying on remittances that invest between 5-10% of the remittances income). Therefore failure to invest is not necessary a fact of lack of knowledge and insight, but more of scant resources necessitating a shoe string budget. Over 95 percent of the respondents acknowledged being aware of the need to invest.

Despite the usefulness of remittances, the survey identified some challenges impeding easy transfer of remittances to the households.

3.6 Challenges with remittances

All the respondents aired their disgruntlement with the costs and delays associated with receiving their incomes from abroad. From the study, over ten percent of the actual amount remitted is paid in remitting costs which is a serious concern given the intended uses of the income and the fact that majority (66%) of the households rely solely on that form of income. The results concur with costs reported by World Bank in 2012 and PASSOP (2012). Whether the costs are borne directly by the recipient or by the sender, the amount available for the households' needs is reduced by such high costs. Ncube and Houggard (2010) asserts that the bulk of money transfers from South Africa to other SADC countries are done informally (e.g. by people carrying cash or sending cash with a bus or cross-border taxi) due to restrictions within the formal financial sector. Such modes of transmission carry great risks. The cost of sending remittances to Sub-Saharan Africa is the highest among developing regions and Zimbabwe is no exception.

4 Conclusion and policy recommendations

Remittances have played a significant role in sustaining daily livelihood of former BHP employers in Chegutu town, a town with limited economic opportunities in a country that was facing major macroeconomic instabilities.

The paper sought to investigate the first order effects of remittances on household income and the uses the income is directed towards. Firstly lower levels of initial income and availability of males of working age in the family (not just number of household members) are strong determinants of migration. Secondly, migration and the dwelling size contribute significantly to the household income and thus the potential to improve livelihood as household finances

improve. Therefore the first order effects of remittances are raising household income.

Thirdly, remittances positively improve consumption by households and a close scrutiny revealed that the consumption is mainly for key basic goods and services like health, municipal services bills, food and disturbingly to a lesser extent education. There is a serious concern if education is not prioritized as there is a danger of the families to be trapped into poverty for generations; the government should prioritize education in its pro poor spending given that it is not on the top priority list by households, especially the more economically vulnerable ones.

Lastly, investment has not been well considered by those without alternative income sources when using the remittances income. This is more to do with scarce resources than lack of awareness among the community members, which could be improved by reducing the costs associated with remitting, both financial and time. The limited investment projects have been building houses (increasing the dwelling size).

4.1 Policy implications

Remittances increase consumption and leisure in the recipient household, indicating that remittances improve welfare and can be effective in poverty reduction. However the cost of remitting is cited as the major stumbling block. Given that remittances increase household consumption and access to varied basic services, policies enabling timely and affordable remitting may create fiscal space for other pro poor projects.

Remittances have the potential to increase sustainability of family livelihood; therefore policies to reduce the cost of remitting if implemented can have far reaching benefits. There is need for transparency in the channels so that remitters and their recipients feel comfortable utilizing these channels. If formal channels are used, this may help speedy recovery of the financial sector and allow greater financial inclusion of the population which across literature has the benefit of reducing poverty.

In short, the Zimbabwean policymakers and all interested stakeholders should start to view emigration positively and provide the necessarily supporting institutional facilities to allow easy remitting.

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References

- [1] Adams, R.H. (1994), Non-Farm Income and Inequality in Rural Pakistan: A Decomposition Analysis, *The Journal of Development Studies*, 31(1),

110-133.

- [2] Adams, R.H., and Page, J. (2005) Do international migration and remittances reduce poverty in developing countries? *World Development*, 33(10): 1645–1669.
- [3] Adams, R. H. (2006) Remittances and Poverty in Ghana; Policy Research Working Paper 3838, World Bank, Washington, DC
- [4] Adams, R.H., Cueduecha, A., and Page, J.(2008) The Impact of Remittances on Poverty and Inequality in Ghana; Policy Research Working Paper 4732, World Bank, Washington, DC
- [5] Bracking, S., and Sachikonye, L. (2006) Remittances, poverty reduction and the informalisation of household wellbeing in Zimbabwe; Working Paper No. 45,
- [6] Bracking, S., and Sachikonye, L. (2010) Migrant Remittances and Household Wellbeing in Urban Zimbabwe; *International Migration* Vol. 48 (5) 2010, doi:10.1111/j.1468-2435.2008.00503.x
- [7] Calero C., Bedi A.S. and Sparrow R.(2008) Remittances, Liquidity Constraints and Human Capital Investments in Ecuador, The Hague, Institute of Social Studies, Working Paper nr 458.
- [8] Carney, D. (ed). (1998) Sustainable rural livelihoods: What contribution can we make? London: DFID.
- [9] de Haas, Hein (2008) The internal dynamics of migration processes. Paper presented at IMSCOE Conference on Theories of Migration and Social Change. St Anne’s College, University of Oxford, 1-3 July 2008.
- [10] Escobal, J., (2001) The Determinants of Nonfarm Income Diversification in Rural Peru, *World Development* 29(3), 497-508.
- [11] Ellis, F., (1998) Household Strategies and Rural Livelihood Diversification, *Journal of Development Studies* 35(1): 1-38.
- [12] Finmark Trust, (2012) SADC Remittance Flows Report
- [13] Freud, C., and Spatafora, N. (2005) Remittances: transaction costs, determinants, and informal flows; Policy Research Working Paper No. 3704, The World Bank, Washington, DC.
- [14] Garip F. (2007) The Impact of Migration and Remittances on Wealth Accumulation and Distribution in Rural Thailand, Department of Sociology, Havard University, Available Online: http://www.wcfia.harvard.edu/sites/default/files/garip_development.pdf

- [15] Gupta, S., Pattillo, C. and Wagh S. (2009) Impact of Remittances on Poverty and Financial Development in Sub-Saharan Africa; International Monetary Fund; IMF Working Paper WP/07/38
- [16] Gustafsson, B., and Makonnen N. (1993) Poverty and Remittances in Lesotho; *Journal of African Economies* 2 (1): 49–73.
- [17] Halliday, T. (2006) Migration, Risk and Liquidity Constraints in El Salvador; *Economic Development and Cultural Change* 54 (4): 893–925.
- [18] Hoti, E. Remittances And Poverty In Albania; Department of Economics at the University of Lund, 2009:6; Minor Field Study Series No. 192.
- [19] Kiiru, J. (2010) Remittances and Poverty in Kenya. OIDA International Journal of Sustainable Development, Vol 1, No. 8: pp.33-41, 2010.
- [20] Kimhi, A., (1994) Quasi Maximum Likelihood Estimation of Multivariate Probit Models: Farm Couples' Labor Participation, *American Journal of Agricultural Economics* 76(4), 828-835.
- [21] McDowell, C. and de Haan, A. (1997) Migration and Sustainable Livelihoods: A Critical Review of the Literature. IDS Working Paper No. 65. Brighton: IDS.
- [22] Ncube, S. and Houggard C., (2010), So near, yet so far? Assessing the 90-day permit for Zimbabwean migrants as a remittances financial inclusion tool; Centre for Financial Regulation and Inclusion; University of Stellenbosch Business School Bellville Park
- [23] Nyberg-Sorensen, N., N. Van Hear, and P. Engberg-Pedersen (2002) The migration-development nexus: evidence and policy options; *International Migration*, 40(5): 4974.
- [24] Odozia, J.C., Awoyemia, T., and Omonona, B.T. (2010) Household Poverty and Inequality: The Implication of Migrants' Remittances in Nigeria; *Journal of Economic Policy Reform* 13 (2): 191–99.
- [25] Oucho, J. O. (1990) Migrant Linkages in Africa: Retrospect and Prospect; in the Union for African Population Studies (UAPS), Commissioned Papers, Conference on the Role of Migration in African Development: Issues and Policies for the 90s". Dakar: UAPS, pp. 109-141.
- [26] PASSOP (2012): People Against Suffering Oppression and Poverty.
- [27] Quartey, P, and Blankson, T. (2004) Do Migrant Remittances Minimize the Impact of Macro-volatility on the Poor in Ghana; Report prepared for the Global Development Network, University of Ghana, Legon.
- [28] Ratha, D., Mohapatra, S., O'zden, C., Plaza S., Shaw, W., and Shimeles A. (2011) Leveraging migration for Africa: remittances, skills, and investments; Washington, DC : World Bank, 2011.

- [29] Ratha, D., and A. Silwal (2012) Remittance flows in 2011 - an update. Migration and Development Brief 18, 23 April. [http://siteresources.worldbank.org/INTPROSPECTS/Resources/3349341110315015165/Migration and DevelopmentBrief18.pdf](http://siteresources.worldbank.org/INTPROSPECTS/Resources/3349341110315015165/Migration%20and%20DevelopmentBrief18.pdf).
- [30] Shroff, K., (2009), Impact of Remittances on Poverty in Mexico; Working Paper Yale College '09, Prepared for the Global Citizenship Conference, May 2009
- [31] Sorensen, N. (2004) Migrant Remittances as a Development Tool: The Case of Morocco; IOM Working Paper 2, International Organization for Migration, Geneva. http://www.belgium.iom.int/pan-europeandialogue/documents/remittances_morocco.pdf.
- [32] Stark, O. and Bloom, D.(1985) The New Economics of Labor Migration; American Economic Review 75(2):173-78.
- [33] Todaro, M. P. (1969) A Model of Labor Migration and Urban Unemployment in Less Developed Countries; American Economic Review 59(1): 138-48.
- [34] Weiss-Fagan, P. (2006) Remittances in Crisis: A Haiti Case Study; Overseas Development Institute, London. http://www.odi.org.uk/hpg/papers/BG_Haiti_remittances.pdf.
- [35] Wouterse, F. (2010) Remittances, Poverty, Inequality and Welfare: Evidence from the Central Plateau of Burkina Faso; Journal of Development Studies 46 (4): 771–89.
- [36] Yang, D., and Martinez, C. (2006). Remittances and Poverty In Migrants' Home Areas: Evidence from the Philippines. In C. Ozden and M. Schiff (eds), International Migration, Remittances and the Brain Drain. Washington, DC: World Bank.
- [37] World Bank (2012) Remittance Price Worldwide ; An Analysis of Trends in the Average Total Cost of Migrant Remittance Services: Issue No. 4 November 2012, available at <http://remittanceprices.worldbank.org>

Table 1: Basic Statistics

Stats	Dwelling size	Male over 16	Household size	Income per capita incl. remittances	Income per capita excl remittances
Mean	4.225	2.13	5.365	508.275	143.025
Standard dev.	1.440399	0.9527005	1.638658	83.99404	232.3231

Source: Own generated Statistical results using STATA 11 software

Table 2: Correlation among variables

	mig_	dwe_sz	male_16	hhsz	inc_pc	inc_pc_r
mig_	1.000					
dwe_sz	0.6048	1.0000				
male_16	0.5529	0.2569	1.0000			
hhsz	0.1431	0.0821	0.2398	1.0000		
inc_pc	-0.2410	0.1322	-0.0081	-0.0318	1.0000	
inc_pc_r	0.8228	0.5858	0.4687	0.1255	0.0328	1.0000

Source: Own generated Statistical results using STATA 11 software

Table 3: Household level Determinants of Migration

Dependent variable: migration (mig_)	Coefficient	Std. Err.	P-values
male_16	.2506458	.0267861	0.000
hhsz	.0009548	.0155805	0.951
inc_pc	-.001222	.0002951	0.000
_cons	.3857838	.1027977	0.000
Number of observations: 200			
Adj. R-Squared: 0.3518			

Source: Own generated Statistical results using STATA 11 software

Table 4: Impact of remittances on total household income

Dependent variable: overall household income (inc_pc_r)	Coefficient	Std. Err.	P-values
mig_	383.3512	31.27966	0.000
dwe_sz	23.11254	8.12922	0.005
male_16	8.590093	11.97641	0.474
hhsz	.3957102	5.822391	0.946
_cons	102.6913	42.02701	0.015
Number of observations: 200			
Adj. R-Squared: 0.6838			

Source: Own generated Statistical results using STATA 11 software

Table 5: Uses of Remittances

Dependent variable: consumption expenditure (conexp)	Coefficient	Std. Err.	P-values
exp	-.000821	.0000727	0.000
mig_	.0774067	.0390241	0.049
hhsz	.0441694	.0059217	0.000
_cons	.9638206	.0372405	0.000
Number of observations: 200			
Adj. R-Squared: 0.6137			

Source: Own generated Statistical results using STATA 11 software

Table 6: Determinants of Consumption

Dependent variable: consumption expenditure (conexp)	Coefficient	Std. Err.	P-values
mig_	124.2445	23.20892	0.000
hhsz	26.52686	3.521824	0.000
inc_pc_r	.3376527	.0432621	0.000
_cons	-14.97542	22.14817	0.500
Number of observations: 200			
Adj. R-Squared: 0.7487			

Source: Own generated Statistical results using STATA 11 software

Appendices:
Figure A1: Remittances Flows

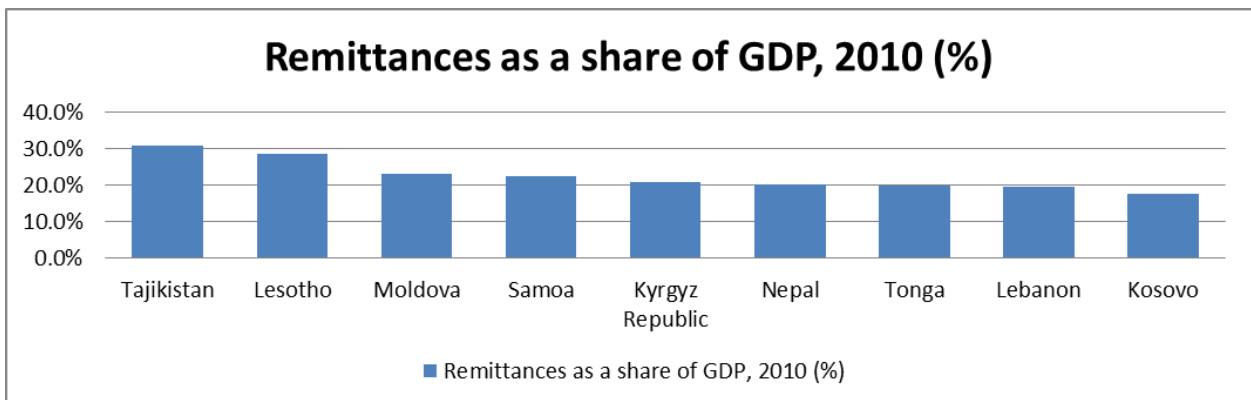


Figure A2: Population growth rates

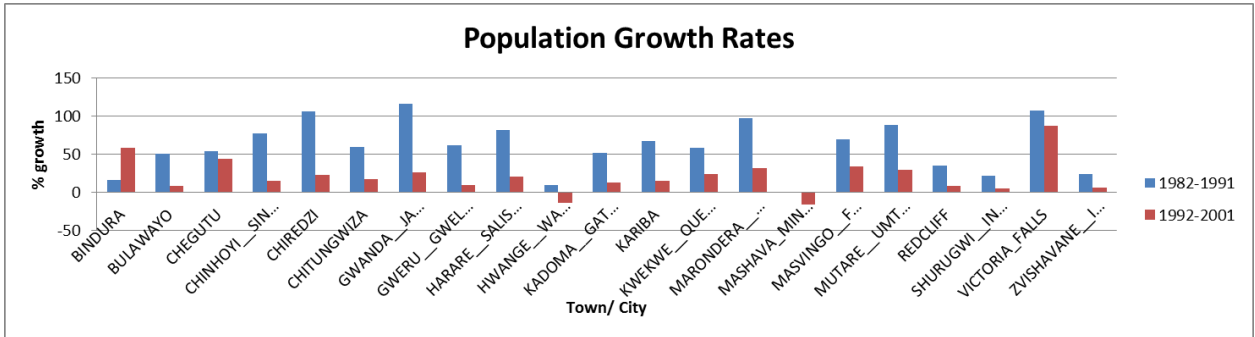
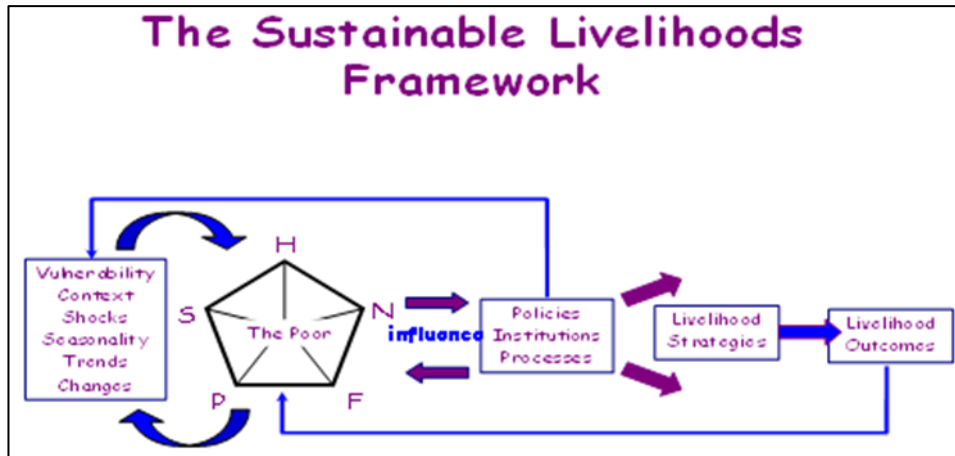


Figure A3: The Sustainability Livelihoods Approach



Source: IFDAS, 2012