

# Lesotho: rural development and migration



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## ACRONYMS AND ABBREVIATIONS

CoW	Commissioner of Water
DRWS	Department of Rural Water Supply
DWA	Department of Water Affairs
EDF	European Development
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
GNP	Gross National Product
GOL	Government of Lesotho
GWD	Ground Water Division
GWP	Ground Water Project
IDCO	Italian Development Cooperation Office
IFAD	International Fund for Agricultural Development
LHWP	Lesotho Highlands Water Project
LUNDAP	Lesotho United Nations Development Assistance Plan
MCC	Millennium Challenge Corporation
MDA	Mineworkers Development Agency
MDG	Millennium Development Goals
MFLR	Ministry of Forests Land and Reclamation
NGO	Non-Governmental Organization
NIP	National Indicative Programme
NSDP	National Strategic Development Plan
UNDP	United Nations Development Program
WB	World Bank
WFP	World Food Programme of the United Nations
WHO	World Health Organization of the United Nation

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Needless to say, the views expressed in this paper are those of the authors; they have the sole responsibility for any error, omission or misinterpretation of data.

# Lesotho: rural development and migration

## EXECUTIVE SUMMARY

In the last decades of the 20th century, about half of the adult male population of Lesotho migrated on a temporary basis to South Africa to work predominantly in gold mines as well as in other sectors.

As such, migrant remittances contributed considerably to the reduction of poverty and to support families in accessing basic assets such as food, cash, education, medical facilities, water, etc. Furthermore, incomes generated by remittances were used to purchase agricultural inputs to improve subsistence farming.

Since early 1990s, the number of Basotho men working as migrant labourers in South African mines has declined drastically over the years (from about 673,000 in 1987, down at 406,000 in 2001 and bottomed at 43,000 in 2010), causing a dramatic drop in remittances and a consequent increase in poverty among the households dependant on such incomes for their living.

Furthermore, the above factor coupled with the sharp increase of population infected with HIV/AIDS (around 24% according to IOM 2014 data) set the basis for the creation of a phenomenon more and more spread worldwide: the feminization of migration.

While in the past, women would only seldom follow men in migration flows, during the past decade more and more women became primary income earners in Lesotho and as such, started to be increasingly present in migration flows.

In an area of high mobility such as the one in consideration, remittances are to be included as factors of human and local development. As such, remittances will always (in larger or narrower measure) be part of the national economy.

Although Lesotho's economy continues to depend to a great extent on migrant remittances, external job opportunities are narrowing down for Basotho people.

A number of factors such as lack of arable land (proportion of arable land in Lesotho has declined from 14% to 9% as a result of urban encroachment, soil erosion and other forms of environmental degradation), lack of irrigation schemes and more in general scarce opportunities of wage employment and income generation activities, made Basotho life conditions very poor, especially in rural areas.

The combination of these two factors (drop in remittances and underdevelopment in rural areas) created an increasing trend towards rural poverty and migration to urban areas or to South Africa in search of informal employment.

All this occurred despite the important investments of international donors and significant improvements achieved by the Government in crucial sectors such as surface water supply, roads, etc. Nevertheless, it has to be said that the above interventions were mostly focused in the urban areas of the Lowlands, with the consequence of basically neglecting most of rural areas of the country.

Therefore, a solid and sustainable improvement of rural areas becomes essential to create a social and economic environment for householders to stay and carry out income generation activities in their homelands. This approach has to be supported with specific actions, where women are included as important subjects of local development. Promotion of institutional support to remittances management aimed at enhancing human development is also another crucial component of this process.

As a result, unless policies and investments foster a comprehensive development of rural areas, which includes agricultural productivity (through irrigation and innovative cultivation techniques), improvement of marketing, creation of income and investments by the private sector etc., the decline of rural economy will be accompanied by increased rural poverty and a consequent growing necessity to migrate.

In light of the above, important challenges appear to be tackled in the next future if the improvements of the past are to yield benefits for the rural areas.

This paper investigates the main characteristics of Lesotho, including its current migrant flows and examines possible interventions for social, livelihood and economic development of rural people and returned home migrants.

This paper aims at underlining that, though migration from Lesotho will always be part of the main characteristics of local economy (for historical, socio-cultural and geographical reasons), the urge and conditions to migrate can be mitigated. In fact, to contribute to poverty alleviation, living conditions of rural people can be improved through a comprehensive and multi-sector rural development, where improvement of water irrigation, agricultural growth and income generation activities constitute main pillars.

## **1. INTRODUCTION**

### **1.1 Background**

The central idea of this paper originated by the analysis of the current migration flows, their characteristics and motivations, in relation to rural development.

It looks that nowadays the main migration flows of Basotho still mostly come from rural areas.

Despite the good results achieved by the Government, mainly in the water supply sector, not only migration remains a necessity, but also changed in its main composition.

It can be said in fact that among the main push factors to migrate, poor living conditions of people located in rural areas are the main ones. On the other hand, the vicinity of South Africa, a country with a strong and solid economy (in comparison to Lesotho), a country which shares some cultural background and where the language is not a barrier, where migration paths have been used by Basotho people for decades, create the ideal conditions for perpetrate migration.

As a consequence, “circular” migration to South Africa (and back) has to be considered one of the aspects deeply connected to Lesotho economic and social structure.

In this paper, the analysis of rural development, which includes the two main pillars of water and agriculture along with the detailed description of the main characteristics of the current migration flows will guide us in understanding which are priority areas of intervention to support local development towards the establishment of more inclusive, gender balanced and sustainable living conditions for people in rural areas.

## 2. COUNTRY CONTEXT AND PROSPECTS

### 2.1 The Country

The Kingdom of Lesotho is a small enclave of about 30,555 Km<sup>2</sup> surrounded by the Republic of South Africa (RSA). About three quarter of the country is mountainous, largely inaccessible and sparsely populated, defined as “Highlands”.

The Western quarter of the country consists of “Lowlands”, which include seven of the ten district capitals, most of the population and the best agricultural land. Approximately 90% of the population resides in this Western part of the country, where Maseru, the national capital, and the major urban centres are located.

In the ranking of “Human Development Index”, Lesotho is classified as n°161 country in the world.

### 2.2. The People

The Basotho Nation is an amalgam of mainly Sesotho-speaking peoples, united by Moshoeshe the Great, when Southern Africa was ravaged by disturbances and wars.

In 1884 Lesotho became a British Protectorate (Basutoland during British rule) and finally gained independence in 1966. The Basotho National Party won Lesotho’s first elections in 1965 and ruled until a military coup removed it from office in 1986. The Army ruled until March 1993, when the Basotho Congress Party won all 65 seats in the new National Assembly in an election, which was generally regarded as being free and fair.

Traditionally censuses in Lesotho have recorded both the *de facto* and *de jure* population. The difference between these figures is essentially the number of migrant workers absent from Lesotho at the time of each census.

The 2006 census gives *de facto* population a figure of 1,862,860 and *de jure* a figure of 1,880,661. It is estimated that presently Lesotho has a population of 2.6 million.

English and Sesotho are the two official languages of the country. Lesotho has one of the highest adult literacy rates in Africa. According to 2009 statistics, 95% of women are literate compared to 83% of men<sup>1</sup>.

### 2.3 Geomorphology

Lesotho’s landscape is characterized by two major land divisions, namely “Lowlands” and “Highlands”, each related to the underlying geology.



<sup>1</sup> Source: EFA Global Monitoring Report statistical tables (school year ending in 2009).



The “Lowlands”, ranging in elevation from 1,400 to 1,750m are composed by sedimentary formations of the Karoo Supergroup and minor igneous intrusions, whereas the “Highlands” consist of a dissected basaltic plateau with maximum height of 3,482m at Thabana-Ntlenyane level, the highest peak in Southern Africa.

A transition zone composed of sandstones and basalts, known as the “Foothills”, lies between 1750 and 2000m (see map above).

## 2.4 The Economy

As already mentioned above, Lesotho economy is firmly tied to its dominant neighbour, the Republic of South Africa (RSA), which is also Lesotho’s major trading partner, providing over 90% of its imports and receiving about 80% of its exports.

According to UNDP 2015<sup>2</sup>, since the 1990s, the economy of Lesotho has grown at an average 3.8% per annum. The economy has experienced some structural shifts in its production from predominantly subsistence agriculture to limited manufacturing. However, this has not resulted in increased employment and a decrease in poverty levels in the country as shown by data reported in agriculture in this section.

Lesotho’s currency (the Loti – plural Maloti) is at par with the RSA rand, and capitals move freely between the Common Monetary Area members.

**Agriculture.** According to Lesotho United Nations Development Assistance Plan (LUNDAP) 2013 – 2017, the agricultural contribution to Gross Domestic Product (GDP) has declined over time: from around 20 percent in the 1980s to some 7 percent in recent years.

Despite its declining contribution to the GDP, the agricultural sector in Lesotho continues to be extremely important for rural livelihoods. Most of the rural population (about 70% of total population) relies on farming as their main livelihood source (about 90% of these are subsistence farmers).

Poverty in Lesotho is deeply entrenched in rural areas, where about 70 percent of the people live.

The concentration of economic activities in urban areas has led to high rural-urban migration. This migration and the concentration of economic activities in the few urban centres has exposed the large pockets of rural population to poverty, inequality, and lack of economic opportunities, as well as dependence, to a large extent, on subsistence agriculture and remittances from members of their families employed in South African mines.

People in search of wage employment migrate from rural to urban and peri-urban areas within the country, unless they find an opportunity to work in South Africa or elsewhere. Some people, especially younger women, have been able to find employment in the country’s new industries, mainly the textile industry. But available job opportunities cannot keep up with the demand for wage employment.

40 percent of rural households that do not receive remittances are also the same 40 per cent living below the rural poverty line. This shows that remittances play a central role in mitigating rural-urban migration.

**Industry.** Industry, although still small, has grown over the past decade. The established manufacturing includes clothing, textiles and footwear, agribusiness, engineering, chemicals and pharmaceuticals, building materials, distribution and commercial services.

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<sup>2</sup> Lesotho African Economic Outlook © AfDB, OECD, UNDP 2015



As far as textile industry is concerned, despite its expansion (induced by Chinese investments) and despite the consequent creation of more than 40,000 jobs, it cannot be considered a relevant factor in contributing to set people out of poverty. This is because the majority of the labour force employed in the industry earns a minimum wage.

## 2.5 Rural poverty in Lesotho

Endemic poverty, inequality and unemployment continue to shadow the development of the country.

According to the Bureau of Statistics, 2003/04 and latest available information in 2014, poverty affects 57.1% of the population, up from 56.6% reported in the 2002/03 household budget survey.

The number of very poor has also gone up to 35.1% of the population (latest available information in 2014) as compared to 34% in 2002/03.

Rural areas are the worst affected with poverty head count rate at 59.6% as compared to urban poverty head count of 39%.

This is mostly due to poor agricultural sector performance, which is the mainstay of the rural population. Within these rural areas, poverty is concentrated on specific population pockets: children, elderly people, larger families and those with a single parent. The population below the poverty line (57.1%) receives only 20.8% of the national income.

According to IFAD report “Enabling poor rural people to overcome poverty in Lesotho, May 2008”, poverty in Lesotho is closely linked to lack of income and unemployment, as well as to severe degradation of the natural resource base on which the livelihoods of many rural poor depend on a varying extent. Gross national income per capita in Lesotho is relatively high for sub-Saharan Africa (around USD 1,000), but income distribution is highly unequal.

The dramatic drop in remittances from migrant labourers in South Africa has thrust many rural households deeper into poverty. As demand for migrant labour declined and unemployed migrant workers returned to Lesotho, remittances shrank from about 67 percent of Gross Domestic Product (GDP) in the 1980s/early 1990s, according to the World Bank, to about 29 percent in 2010, according to the Mineworkers Development Agency (MDA). This loss of remittances from mineworkers has had a major impact on the fragile economy of Lesotho.

As already stated, the agricultural sector is the primary source of income, or an important supplementary source, for more than half of the population in rural Lesotho. Of the country's total land area, only about 9 percent is classified as arable.

The majority of small-scale farmers live on what they can produce from cultivating an average of less than 1.5 ha of land or from herding livestock on grazing land that is increasingly and severely degraded, or on occasional income from other sources such as casual labour or remittances. About 30 per cent of rural people live in extreme poverty. They include farmers who have less than 0.5 ha of land, people who are landless and households headed by women. People who live in the rugged mountain areas are significantly poorer than others in the country.

Most small-scale farmers do not have labour or capital or good access to improved technologies and support services they need to use their land productively. Yields are low because of severe land degradation, reliance on rain-fed farming and poor crop husbandry methods. The unfavourable climate (untimely and irregular rainfalls,

abnormal temperature patterns, droughts, etc.), which is worsening as a result of global climate change, hinders exploitation of the agriculture sector's potential.

Lack of consistent investment in agriculture, decline in agricultural production, lack of income-generating activities and degradation of natural resources are among the principal causes of rural poverty.

Poverty has deepened in rural households as a result of decreased remittance incomes they formerly received from migrant family members. Livestock productivity has declined, as stock theft and rangeland degradation have made animal husbandry a less attractive source of income. Many young people turn away from farming as a livelihood, yet urban areas offer few adequate alternatives.

### **3. CHARACTERISTICS OF LESOTHO MIGRATION TO SOUTH AFRICA**

#### **3.1 Migration Patterns**

In order to clarify the position of the authors in this paper, it is important to underline some of the characteristics attributed to the concepts of migration and migration processes.

As Rossi reports (2008:7) "Migration can be permanent, if a person never return to his or her place of origin, or long term if a person moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence. A short-term migrant is defined as a person moving to a country other than that of his or her usual residence for a period of at least 3 months but less than a year (12 months), and often is the status of a person who moves from one region to another in accordance the seasons."

In the specific case of Lesotho, evidences brings to the identification of a typical circular pattern, with a tendency to return once living conditions would get better or when other factors would occur (such as other members of the household would migrate themselves). "Unlike South-North migration which tends to be permanent, Basotho mine migration in the early days was circular: migrants went back and forth to the mines on various contracts, on the basis of need. In more recent times, return migration is becoming the norm. Mensah and Naidoo (2013) provide evidence that Basotho migrant mine workers consider their work as a career and would hold on to it till retirement."<sup>3</sup> In addition, it is important to state that given the strong cultural and linguistic ties between Lesotho and South Africa, those with permanent residence could decide to move their children and wives in South Africa without going through particularly problematic integration challenges.<sup>4</sup>

Furthermore, if migration is seen as a process, then "desires and behaviour become stages in a connected sequence" (Rossi, 1980:119).

The Marxist school of thought on migration recognizes as only pull factor to migrate the analysis cost-benefits of the migrant, who is forced to migrate by the harsh living conditions, and as such the migration process is not a result of a free choice.

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<sup>3</sup> Samuel Nii-Aheleh Mensah (2013:10)

<sup>4</sup> Samuel Nii-Aheleh Mensah (2013).

As Samuel Nii-Aheleh Mensah (2013:8) reports “When applied to Lesotho, the argument of this critique may be presented as follows: the individuals who are perceived as making the decision to migrate (or households seen to decide to send out a migrant worker) is/are not exercising their free choice in the matter because they have been forced into that decision making situation by the expansion of the capitalist mode of production to the vicinity of Lesotho.”

As a matter of fact, some of the people living in rural areas (the social pocket of highest concentration in migrants) decide to migrate and others find the way to cope with the harsh conditions of the area where they live.

As a consequence, the position of the authors is that migration flows are processes dictated by several factors, and not only the economic one. Among factors to be taken into consideration, though as pull factor, it has to be emphasized, what South Africa represents for other African countries.

South Africa, with all its contradictions, is still a symbol of possible change, the representation of a world-wide shared ideal of change and growth.

As such, even though reality is unfortunately different (and often quite bitter for poor migrants from Lesotho), South Africa not only is the closest country, not only shares with Lesotho cultural background and language, it also is the representation of a “land of opportunities”.

On the other hand, another extremely important factor to be taken into consideration when looking at migration flows and their characteristics is peoples’ resilience (see section 3.3). In this paper the aspect “resilience” is treated in a specific section as in the authors’ opinion, resilience not only plays an important role in determining who is migrating and who is not, but it represents the element on which economic and social growth should rely.

The analysis of migration flows is extremely relevant as it reflects changes in society and how people set priorities. As such, reading into changes of migration flows can be useful to better identify measures and policies to be promoted to support sustainable development.

Since 1975 Lesotho has been the dominant supplier of labour in South Africa. It has been widely recognised that migrant remittances contribute considerably to the reduction of poverty. In fact, particular attention should be placed on the importance of remittances for families to access basic assets such as food, cash, education, medical facilities, water and electricity. In this view remittances helped greatly to grow Lesotho’s family economies but only partially to rural economy development.

As Lesotho economy, like many African economies, falls in the category of weak infrastructure, it is unlikely that remittances would contribute significantly to long-term sustainable development at macro level.

The potential remittances to reduce poverty in short or long-term depend almost entirely on the success of national development policies. Poor physical and financial infrastructures, underdevelopment markets, poor investment in job creation would restrict the potential of remittance-focussed strategies for those who would like to invest financial resources.

Villages prospered to a certain extent from remittances during peak periods of recruitment in South Africa mines, but declined after retrenchment of foreign workers in the mines.

According to Samuel Nii-Aheleh Mensah (2013), Lesotho's mine migration experience has predominantly had a distinguishing feature: it is mostly a migration of unskilled labour, as such extremely vulnerable to the unforeseen changes of the labour market offer.

According to the report "Lesotho: From Labour Reserve to Depopulating Periphery?" – 2012, by Jim Cobbe, "Rural poverty in Lesotho has re-emerged with a vengeance, after a brief period of prosperity in the 1970s and 1980s following the rapid increase in the real wages of African mineworkers in South Africa. Poverty is now accompanied by recurrent hunger, as increasing proportions of rural residents are no longer able to grow food. Remittances from migrants, almost entirely through informal channels, continue to be a vital source of income in Lesotho. The World Bank estimates that remittances amounted to 29 percent of the country's gross domestic product in 2010 — the second-highest proportion for any country in the world".

When downsizing and retrenchments in South African mines occurred, between 1983 and 1993, the number of Basotho workers dropped by 17.5 percent; from 96,409 to 79,530, initially as a result of mechanization and relative stagnation in gold mining, and later partly because of a preference for South African labour. As a result of this reduction, Basotho workers hardly affected the growing of national economy. Nonetheless, at micro-economic level, remittances are crucial in the process of poverty mitigation, especially in rural areas.

By highlighting the vulnerability implicit in relying on remittances to mitigate rural poverty, development is relevant in forming sustainable national poverty alleviation strategies.

Concerning the considered migration flow, it follows a typical South-South migration pattern. In a study for the World Bank, Ratha and Shaw (2007) reported that out of 191 million migrants, two fifth (around 78 million) are from less developed or developing countries (placed below the 30<sup>th</sup> position in the "Human Development Index"). And even more relevant for this paper is that "nearly half of the migrants from developing countries reside in countries of the South (74 million), [and] almost 80 percent of these migration flows take place between neighbouring countries" (Ratha and Shaw, 2007).

Nevertheless, if these data are impressive, is important to underline that they constitute only the tip of the iceberg as they are the ones officially recorded. More likely, unrecorded data are much higher.

As a final general remark on the migration flow, which characterizes this part of the world, it has to be stated that it will never disappear completely. Due to common cultural background (a considerable proportion of Basotho people already live in South Africa; there is no language barrier) and due to the economic exchanges already deeply rooted between the two nations a tendency to migrate from Lesotho will always be there, especially when living conditions tend to become more difficult.

As a consequence, remittances will always constitute a part of Lesotho economy.

Under these circumstances, the real challenge is how to channel remittances in concrete actions to promote development especially in the rural areas.

### 3.2 Feminization of Migration from Lesotho

Some of the characteristics of the migration flow have been already underlined in this paper, but it is here extremely interesting to emphasize three important factors: mine labour has dramatically decreased in the past few years and this has determined a sharp shrinkage in remittances originated from this sector; Lesotho is still mostly dependant on remittances; cross-border movement (legal and illegal) between Lesotho and South Africa has reached almost 2 million in 2008 (UN-INSTRAW AND UNDP-2010).

So, if remittances are still generated and still the cross-border movement is high, while the main reason for migrating (working in mines) has decreased, what is happening? What is the current migration flow composition? Who is generating part of the remittances still so important for Lesotho's economy?

Though Lesotho is a highly patriarchal society, several factors in recent years, set the basis for shift in migration flows and composition. As a consequence, women became more and more active subjects of migration flows.

One of the main causes, together with the decrease in demand for mine workers, has been the sharp increase in HIV/AIDS cases (something like 24 percent of the population).

Migration generally exposes people to high-risk behaviour and "makes migrants more vulnerable to infection. As increased economic vulnerability shifts patterns of employment and migration, the epidemic has affected household structure, division of labour and livelihood strategies." (UN-INSTRAW AND UNDP-2010).

In addition, the migration trend from rural to urban areas has turned to be another important factor. The concentration of economic activities in few urban centres has also increased vulnerability to the HIV/AIDS pandemic as young adults leave their families to seek for jobs in the cities. An additional consequence is that rural people's scarce resources are used in caring for the sick ones, covering funeral expenses and supporting orphans. With an HIV prevalence of 24%, Lesotho ranks as the second country most impacted by HIV/AIDS in the world.

More and more women became wage-earners, and as such, substituted men in migration towards South Africa. Nevertheless, the income earned by women is not at the same level as the one of men. As a consequence, households experienced a decrease in the global from remittances.

In general terms, UN-INSTRAW AND UNDP-2010 reports that "there has been a rise in the number of female-headed households — both by delaying or avoiding marriage and by rising levels of widowhood, divorce, and abandonment — from which women migrate as the primary or only income-earner."

More in details, women reported as part of the current migration flows are: divorced, or single mothers, from households where a parent, uncle or aunt is the household head (51 percent); the wives of unemployed men, many whose husbands are former mineworkers or who no longer work due to disease (especially tuberculosis and

HIV/AIDS) or disability (18 percent); and women who are themselves the head of households without an adult male member, many of them widows or divorcees but including women who are simply unmarried (24 percent). (UN-INSTRAW AND UNDP-2010).

In comparison to remittances of males, women participate with much lower wages (M4,825 or US\$633 for female and M11,162 or US\$1,465 for male migrants) to their families' livelihood. In fact they are often employed in the informal sector and anyway, they get on average lower salaries.

Nevertheless, as the majority of remittances are sent through informal channels (money transfers) or in cash (when migrants visit their families), a clear figure of the current global remittances to Lesotho and their composition is quite difficult to be estimated.

Finally, remittances generated by female migrants are generally totally spent in basic items for livelihood.

### 3.3 Resilience

The analysis of the concept of resilience is extremely important in this specific context as resilience development has a direct impact on general living conditions and on migration flows and composition.

As Paul Lagasse says, nowadays the concept of resilience is very popular in the international development sector, but till now no one could give a clear definition of the meaning of resilience applied to development.<sup>5</sup>

“Dr. Barrett, the Stephen B. & Janice G. Ashley Professor of Applied Economics and Management and an International Professor of Agriculture at the Charles H. Dyson School of Applied Economics and Management at Cornell University, identified three reasons why resilience has become important to the development community in recent years:

Risk – whether from climate change, violence and conflict, or other stressors – is increasing, particularly in low- and middle-income countries. Crises have exposed longstanding difficulties in reconciling humanitarian responses, which focus on the moral obligation to safeguard human life, with development objectives, which focus on long-term improvements of living standards. There is a growing recognition of the interdependence of biophysical and socio-economic systems, especially in places where people are disproportionately dependent on natural systems for their livelihood and are thus vulnerable to natural shocks, such as droughts or floods.” (Lagasse: 2014).

Though there is not consensus on the main characteristics of resilience, it is recognized being among the most important aspects in linking relief, rehabilitation and development (LRRD).

Oxfam (2013: 5) reports that ‘building resilience will mean breaking down the barriers between humanitarian and development approaches more fundamentally than ever

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<sup>5</sup> The concept of resilience refers to the ability of human beings to adapt to challenging situations and changes.

before. Responses to humanitarian and economic crises need to be brought together with responses to foster long-term development’.

In this paper, the authors’ are mostly concerned with the application of the concept of resilience to rural development.

In particular, when applying the concept of resilience to rural development constant feedbacks and co-adaptations exist between the social and ecological elements of the system (Ostrom 2009), with interplay between culture, land use, human decision making and ecosystem processes (Anderies et al. 2004). Knowledge and governance form the ‘bridge’ between the social and ecological components of the system (Berkes 2009). The ability of humans to respond appropriately to changes in the ecosystem is promoted or constrained by awareness, motivation and capacity to respond (Lambin 2005).

During the past years the Food and Agriculture Organization (FAO) and World Food Programme’s (WFP) have put in place a Resilience Strategy for Lesotho in order to increase food and nutrition security among rural communities especially through conservation and rehabilitation of Natural Resources and strengthened Disaster Risk Reduction (DRR) capacities.

The resilience strategy conceived by the two agencies builds on the experience of the coordinated emergency responses in response to the 2011/12 drought. The ECHO funded intervention was based on the idea that the humanitarian assistance needed to be conceived to meet immediate emergency needs and at the same time, creating the foundations of a longer-term resilience approach. In particular, “the emergency interventions focused on income generation (cash and food for assets), where the main assets were erosion control structures and seed provision combined with agriculture conservation techniques, to increase production and improve soil structure to reduce erosion.” (FAO: 2014). The strategy here reported covers the entire country and it is part of the United Nations (UN) Lesotho Resilience Strategic Framework. The main outcome of this approach is “to reduce future humanitarian needs, foster a culture of prevention and promote sustainable growth models in a context of Climate Change threats.” (FAO: 2014).

The outcomes of these intensive interventions are part of mid-term evaluation reports commissioned by FAO.

The general impact of the interventions is positive, especially in terms of changes of thinking approach to the environment and to the management of it (thanks to training courses provided to key people as well).

This does not mean that vulnerability of the economy of the country to external factors has decreased, but, on the other hand, that the ability of population pockets to cope with some of the most difficult factors has increased.

This last aspect leaves an open door on the idea of working around resilience of rural people to develop better living conditions and mitigate conditions and urge to migrate.

### **3.4 Remittances**

Remittances has been studied with more attention in the past years as in situations like Lesotho, they potentially play an important aspect for human and general development if correctly applied.



Remittances to Lesotho have very peculiar characteristics as they are all originated in South Africa, and Lesotho's economy is highly dependent on them.

Even though during the past few years remittances have dropped in comparison to the past, they are still an important chapter of the national economy.

The "ACP Observatory on Migration" is an initiative of the Secretariat of the African, Caribbean and Pacific (ACP) Group of States, funded by the European Union, implemented by the International Organization for Migration (IOM) in a Consortium with 15 partners. In "The remittances framework in Lesotho: Assessment of policies and programmes promoting the multiplier effect" (2012) it is reported that nowadays remittances are mostly sent to families through informal channels (direct handing of money or through friends).

A deep control of remittances is virtually impossible as the real amount of them is unknown.

Nevertheless, a number of actions can be activated and supported in order to promote a positive multiplier effect on Lesotho development mechanisms to ameliorate general living conditions of the population.

Here below, some of the key recommendations of the ACP Observatory on Migration ("The remittances framework in Lesotho: Assessment of policies and programmes promoting the multiplier effect", 2012) are reported.

"- Facilitating remittances inflows. Remittances are private, not public funds and all measures taken to leverage remittances need to be accompanied by measures creating a favourable economic, legal and political environment to foster human development. - Developing a comprehensive remittance policy for encouraging Basotho migrants who work and live in other countries to send money home through formal channels and leveraging remittances for development. - Developing a strategy for engaging with female migrants on remittances and development issues. Studies have shown that a large number of female migrants working in South Africa are involved in low paying occupations such as domestic work and farm work. Because some of these migrants' employment is seasonal, and their wages are very low, they cannot access banking services and hence resort to informal channels for remitting money home. - The Government of Lesotho could engage in bilateral dialogue with the host countries' authorities on measures to facilitate remittances inflows through formal channels, and reduction of the costs of transferring remittances, among others."

Among the suggested leveraging remittances for development "Developing remittances-linked financial products. -Introducing matching programmes. In these programmes the government multiplies the contributions of migrants and diasporas that are invested into development projects in the country and in their communities. - Promoting Priority Investment Projects by organizations like the Lesotho National Development Corporation to established Basotho migrant and diasporas associations as well as individual migrants and diasporas."

On the civil society side it would be important to support the creation of associations and organizations of migrants and diaspora people. In this way, they could seek for formal support from the government. Furthermore, the creation and proliferation of associations and organizations would support a more solid and vast network for

campaigning and distributing information (even by using local media like radios or TVs).

## **4. RURAL DEVELOPMENT**

Lesotho's development strategy is outlined in the National Strategic Development Plan (NSDP), which covers the period 2012/13 - 2016/17. The NSDP has six strategic pillars: (i) Pursue inclusive growth; (ii) Develop key infrastructure; (iii) Enhance the skills base, technology adoption and foundation for innovation; (iv) Improve health, combat HIV and AIDS and reduce vulnerability; (v) Reverse environmental degradation and adapt to climate change; and, (vi) Promote peace and democratic governance, and build effective institutions.

The NSDP has identified agriculture, manufacturing, tourism and improving the investment climate as the growth drivers.

Rural development sector, which is an essential part of this paper, is included in pillar (v) "Reverse environmental degradation and adapt to climate change" In pillar (v), the World Bank supports mainly the water sector, while the EU supports mainly agriculture.

Pillar (v) "Reverse environmental degradation and adapt to climate change" includes the *Rural Development*, which comprises two essential sectors, namely water and agriculture.

### **4.1 Water sector**

In 2000 the United Nation's Millennium Development Goals called for the number of people without access to clean water to be halved by 2015. While only some 50 percent of the population had access to potable water when the MDGs were promulgated, access to clean water and sanitation has subsequently improved considerably.

WHO/UNICEF Lesotho water supply statistics for 2014 put the percentage of the population using improved drinking water sources at 81.3 percent, with this figure standing at 93.2 percent for urban communities and 76.7 percent for rural dwellers. Furthermore, 65.6 percent of the urban population are served with piped water. In the realm of sanitation, 29.6 percent of the population overall have access to improved sanitation facilities, comprising 37 percent of urban residents and 26.7 percent of those in rural areas.

#### **4.1.1 Lesotho Highlands Water Project**

Lesotho constitutes one of Southern Africa's principal water catchment areas, capturing around 50 percent of the total catchment run-off. The mountain ranges experience approximately 1000 millimetres of rain per year and give rise to the major river systems of the Senqu (Orange), Mokare (Caledon) and Makhaleng. Every year, rainfall and winter snowfalls provide an estimated 5.5 billion cubic metres of water and renewable groundwater resources of some 340 million cubic metres. Since the implementation of the Lesotho Highlands Water Project (LHWP), water has become the country's most valuable natural resource as well as being its largest

single source of non-tax revenue; and the start of the LHWP Phase 2 has reinforced its central role in Lesotho's economy.

The LHWP – [www.lhwp.org.ls](http://www.lhwp.org.ls) – identified more than 50 years ago as the most cost-effective water resource exploitation benefitting both Lesotho and South Africa, is one of the most ambitious engineering projects ever undertaken in Africa. The water transfer scheme provides water for South Africa's domestic and industrial use, by a system of surface water reservoirs and interbasin / transboundary water transfers, while Lesotho benefits from the associated infrastructure, such as roads, as well as hydroelectricity and royalties.

#### 4.1.2 Water Supply

Water is considered by the Government of Lesotho one of the first priorities to support the Basotho population both in the Lowlands and Highlands.

Lesotho has abundant water resources, even exceeding national requirements. However, limited access to these resources – due to uneven distribution of water supply, particularly in the Lowlands where about two-thirds of the population live – has been an obstacle to growth and development as well as efforts to prevent waterborne diseases.

Improved supplies are especially important for Maseru and its surrounding areas, which are where the largest part of textiles and light manufacturing firms are located. The expansion of the garment industry has also driven rural-urban migration. As the population has grown, so has the demand for reliable residential supplies.

Despite abundance of water, Lesotho experiences frequent water supply problems in areas of population concentration, in the mountains, and for industry. Approximately 77 percent of all households (91% urban and 73% rural) have access to a dependable water supply.

Access to water is particularly problematic in the Western Lowlands, where two thirds of the population lives and where the greatest potential of creating employment opportunities is concentrated, if expansion of industry and manufacturing, as well as income opportunities through improvement of agriculture production, are supported.

The importance of investment in the water sector is reflected in "Vision 2020" and the high priority recognized to the sector in the public investment programme under the Lesotho's National Strategic Development Plan (NSDP).

NSDP underlines, in particular, the need to develop the water sector with a view to improving food security, rural incomes, and public health, but at the same time stresses the importance of environmental preservation and protection in the implementation of future investments.

To address the challenges in water and sanitation, NSDP identifies two strategic objectives for the sector:

- Expand water and sanitation distribution services to industries, commercial centres, households and other institutions;
- Expand water harvesting infrastructure for increased security of supply in remote areas.

The Government has embarked on an elaborate programme for the improvement of the water supply and sanitation across the country to address the challenge of

increasing service coverage and ensuring sustainable management and development of water resources.

Much has been achieved in recent past with respect to improving water supply and sanitation in urban and to some extent in rural areas. While completion of the on-going works will ease water shortages in many urban areas, water supply must be extended to those locations not covered by this project. Provision of basic utilities in rural locations will continue to be a priority as Lesotho addresses the stark inequalities between urban and rural communities.

Regarding the water supply to rural areas, it would be worthwhile to recall the achieved results, groundwater assessment methodologies and recommendations provided by one of the precursor Projects within the water sector, such as the Ground Water Project (1982-1993).

#### **4.1.3 Ground Water Project (Italian Cooperation 1982 – 1993)**

Following a request of the Government of Lesotho (GOL), in 1982 the Government of Italy financed the Ground Water Project with the main aim of establishing a new Division (GWD) within the Department of Water Affairs (DWA) to be in charge of management of the ground water resources of the country.

The findings and recommendations supported by GWP/GWD in 1993 on well siting and water supply in rural areas and the positive development of the water sector are worthwhile mentioning. The then findings and recommendations, which are considered useful to the current groundwater research and supply are listed in the “Ground Water Project” report, attached to the “Hydrogeological Map of Lesotho”, 1: 300.000, published in 1993.

It is greatly appreciated that most of suggestions, plans and policy drafts that the GWP shared and agreed upon with DWA and GWD during the Project duration (1982-1993) have been implemented during these last 23 years.

In this last two decades the Government of Lesotho achieved remarkable results in water supply to the population, and to its industrial sector. In particular, good progresses are evident in urban centres of the “Lowlands”, while in the “Highlands” and in rural areas a lot of water supply works still need to be done.

A strong performance in the water sub-sectors, as well as improvement in agriculture production through irrigation and service sector (including financial support, communications, electricity and transport), would support rural population in its overall economic, social growth and more in general its resilience development.

The suggested rural development strategy aimed at improving livelihood opportunities and life conditions when duly applied, may result as mitigation factor to migration, in particular from rural areas.

## **4.2 Agriculture sector**

Lesotho’s National Strategic Development Plan (NSDP), which aims at maximising the growth potential of private sector in the medium term, sets agriculture as one of its main pillars.

As agriculture in Lesotho has thus far been constrained by lack of diversification, modernisation and marketing, Government’s strategy is nowadays to improve agricultural supply chains as well as marketing infrastructure, broadening the subsidy

programme across all subsectors<sup>6</sup>. All this, despite Lesotho's arable land is estimated at 279,733, hectares, which constitutes only 9 percent of the total land area and only a small percentage is presently used for irrigated crop production (maize, sorghum and wheat).

In Lesotho the decline of the agricultural sector is attributed to two main factors: the growth of other sectors (notably manufacturing and mining), and to the agricultural sector's own declining performance and output.

This last mainly caused by: land resources limitations and conditions; deteriorating conservation and management practises; depleted soils; underutilized water resources; limited irrigation and use of fertilizers, pesticides and improved seeds; weak extension systems; poor access to markets for small producers and severe labour constraints caused by migration of men and women to RSA and neighbouring countries.

Another important factor to be taken into consideration as part of the whole declining scenario is HIV/AIDS pandemic (see section 3.2), which has drastically reduced labour available for cultivation.

The agricultural sector is the primary source of income, or an important supplementary source, for more than half of the population in rural Lesotho. The majority of small-scale farmers live on what they can produce from cultivating an average of less than 1.5 ha of land or from herding livestock on grazing land that is increasingly and severely degraded, or on occasional income from other sources such as casual labour or remittances.

About 30 per cent of rural people live in extreme poverty. This figure includes farmers who have less than 0.5 ha of land, people who are landless and households headed by women. People who live in the rugged mountain areas are significantly poorer than others in the country. The lack of investment in agriculture, the decline in agricultural production, the lack of income-generating activities and degradation of natural resources are among the principal causes of rural poverty.

Poverty has deepened in rural households that have to manage without remittance incomes they formerly used to receive from migrant family members.

Livestock productivity has declined, as stock theft and rangeland degradation have made animal husbandry a less attractive source of income. Many young people turn away from farming as livelihood, yet urban areas offer few adequate alternatives.

According to NSDP, agriculture in Lesotho has plummeted tremendously over the years and actions need to be taken to revive it, increase food security and support to employment.

Main NSDP strategic objective in this regard is to promote sustainable commercialisation of the sector and diversification of agricultural products by improving access to finance and improving capacity to produce high value products, developing water harvesting infrastructure and increasing irrigation capacity. As a consequence, capacity of farmers and of agriculture support institutions will be strengthened through training and relevant research.

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<sup>6</sup> The Lesotho review – Wade publications – 2015 edition

## 5. LINKS BETWEEN RURAL DEVELOPMENT AND MIGRATION

The aim of this paper is to examine possible linkages between rural development (particularly regarding water supply and agricultural sectors) and migration in Lesotho.

As already mentioned, in Lesotho the situation has worsened on both aspects of rural living conditions (water-agriculture-livelihood facilities, etc.) and migration opportunities (remittances). These two examined aspects can be summarized as follows:

### a) Rural development: water and agriculture subsectors

- The Lesotho Highlands Water Project is one of the most ambitious engineering projects ever undertaken in Africa. The water transfer scheme provides water for South Africa's domestic and industrial use, while Lesotho benefits from the associated infrastructure, such as roads, as well as hydroelectricity and royalties.
- Despite the apparent surplus of water in the country, major shortages in supply occur due to the transfer of water and the location of the major water demand centres in the Western "Lowlands" and in most of the "Highlands". Limited access to these resources – particularly in the Lowlands where about two-thirds of the population live – has been an obstacle to growth and development.
- Lack of water supply in rural areas, in particular for irrigation purposes, is hampering development in agriculture production and productivity, essential to reduce poverty and improve the standard of living of smallholder farmers. The majority of small-scale farmers live on what they can produce from rain-fed lands (average of less than 1.5 ha) or from herding livestock on grazing land that is increasingly and severely degraded.
- In addition to lack of water supply for irrigation, most small-scale farmers do not have the labour or capital or the good access to improved technologies and support services that they need in order to use their land in the most productive way. Agricultural yields are low because of severe land degradation, overreliance on rain-fed farming (90% of farmers practice rain-fed subsistence agriculture, which is vulnerable to drought and erratic rains/temperatures) and poor crop husbandry methods. The unfavourable climate (untimely and irregular rainfalls, abnormal temperature patterns, droughts, etc.), which is worsening as a result of global climate change, hinders exploitation of the agriculture sector's potential.

### b) Migration

- Drop of remittances from South Africa. Migrant remittances contribute considerably to the reduction of poverty and for their families to access basic assets such as food, cash, education, medical facilities, water and electricity. In early 1990s, the dramatic drop in remittances from migrant labourers in South Africa has thrust many rural households deeper into poverty. As demand for migrant labour declined and unemployed migrant workers returned to Lesotho, remittances significantly shrank, although are still crucial at micro-economic level, especially in rural areas.

- Rural-urban migration. Poverty in Lesotho is deeply entrenched in rural areas, where about 70 per cent of the people live. People in search of wage employment migrate from rural to urban and peri-urban areas within the country, unless they find an opportunity to work in South Africa or elsewhere. Some people, especially younger women, have been able to find employment in the country's new industries, mainly the textile and garment industry. However, available job opportunities cannot keep up with the demand for wage employment.

The combination of dramatic drop in remittances from migrant labourers and the rural underdevelopment such as water for irrigation, support services and assets necessary to use the arable land productively, lack of income opportunities make the livelihood situation of rural people very critical.

Then, the raised questions are: "Which actions to create conditions as to avoid migration becomes a necessity?"; "How to build resilience among Lesotho's rural communities?"

## **5.1 Potential Actions aimed at rural development and at building resilience of Lesotho's rural communities**

This paper has highlighted the critical and worsening situation of rural population due to the combination of rural underdevelopment and retrenchment of mineworkers.

In order to create the conditions to make migration as not the only obliged solution to find a wage employment or a necessary for survival/subsistence of homesteads, it is of paramount importance to study potential actions aimed at poverty reduction of rural people and at building Lesotho's rural communities resilience.

While the Government has already achieved very good targets in rural development, still lot remains to be done. Here is reported a list of suggested actions:

### **Water sector**

A proper use of the exploitable water resources is considered one of the most important aspects of rural development. In particular, irrigation might have a significant role on the improvement of agriculture.

- Groundwater:
  - ⇒ Monitor, refine groundwater policies and legislation adopted by Government. Some key rural areas are not adequately served with water resource supply, while resettlement, sanitation, water pricing, water resources development and water conservation are important issues in rural development policy.
  - ⇒ Mapping of available groundwater resources (wells and springs) already used for drinking purposes and irrigation. Studying the potential improvement of agriculture production and productivity in those areas.
  - ⇒ Assessment of new potential groundwater resources (wells and springs) to be used for drinking water and irrigation aimed at agriculture production and livestock. Hydrogeological assessments for well/spring exploitation should be done according to recommendations described in



“Hydrogeological map of Lesotho”, scale 1: 300.000 (see dolerite dykes) with particular attention to high yield aquifers.

- ⇒ Construction of irrigation schemes adequate to yield and agricultural needs. Use of sustainable irrigation systems for water saving and adapted to different types of crops is recommended (for example, “EXPO 2015: A new irrigation method saves water and farming lands in Syria”, or drip irrigation).
- ⇒ Creation and training of associations of water users for management and maintenance of the irrigation systems.
- ⇒ Provision of technical assistance by the Government water authorities to associations of water users for management and maintenance of the irrigation systems.
- ⇒ Construction of water tanks. Most of new houses are constructed with corrugated iron roofing (as opposed to older styles using thatching grass), it is now possible to greatly improve household vegetable production using rain water collected in inexpensive water tanks constructed on site.
- Surface water:
  - ⇒ Completion of on-going works for the water supply to some urban centres and rural areas. Assessment of areas with potential development of income generation interventions through improved water supply.

### **Agricultural sector**

According to Lesotho Poverty Reduction Strategy Paper (PRSP) of 2012, developed by the International Monetary Fund (IMF), agriculture is among the main sources of employment and income in rural areas.

In line with Lesotho’s National Strategic Development Plan (NSDP), proposed actions to be undertaken are the following:

- ⇒ Support to vulnerable households with agricultural inputs and know-how on agricultural technologies, helping communities to adapt to climate change and build their resilience to better withstand future shocks.
- ⇒ Support to crop productions such as maize, sorghum and wheat as well as diversity products (horticulture, high value chain products).
- ⇒ Support to irrigated home gardens, especially for women. Prioritise use of land around homes. Priority shall be given to ensuring that land around people’s homes (that is closest to animal manure and most easily defended against theft) is made as productive as possible, particularly for vegetable production.
- ⇒ Support to irrigated production, diversification of crops, wool and mohair<sup>7</sup>, dairy, piggery and poultry hatcheries (value chains, which possess considerable potential to contribute to economic growth and poverty reduction).

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<sup>7</sup> Wool and mohair are two of the country’s major income earners, with considerable potential for expansion.

- ⇒ Promotion of crop diversity, soil biodiversity and social diversity into programme design. The diversity of seeds provided for home gardens is a significant innovation to increase diversity.
- ⇒ Support the introduction of new technologies to reduce soil erosion and environment protection (see “likoti” technics here below).
- ⇒ Support to livestock industry.
- ⇒ Support to smallholder farmers in exploiting opportunities and increasing productivity, as well as diversifying into market-oriented agriculture.
- ⇒ Revitalization of *block farming*<sup>8</sup> and conservation agriculture.
- ⇒ Capacity development of lead farmers and agricultural extension services.

“FAO Lesotho Emergency and Resilience Programme” aims at achieving combined adaptation and mitigation outputs by using focused approaches for sustainable and integrated agriculture practice, for increased resilience of targeted communities.

Land management is at the basis for all crop and livestock production systems. Achieving long-term food security, better nutrition and poverty alleviation is dependent on the use of land and good agricultural practices. Sustainable crop production based on conservation techniques include reduced soil disturbance, protection of soil with organic residue or cover crops and use of viable rotations. These techniques have the added benefit of storing carbon in agricultural soils.

### **Development of inter-disciplinary rural sectors**

In order to improve the living conditions of rural people and contribute to their resilience, it is essential to develop other inter-disciplinary sectors:

- ⇒ Improvement of markets (rural poor people need access to markets in order to move beyond subsistence farming).
- ⇒ Improvement of services (schools, health care, etc.).
- ⇒ Revision of the land tenure system.

In Lesotho land ownership is based on inheritance. Due to lack of resources of poor farmers, many fields remain fallow. Land should be redistributed to capable farmers with the hope to promote small-scale commercial farming.

- ⇒ Promotion of campaigns HIV/AIDS as a crosscutting task.
- ⇒ Support to income generation activities.
- ⇒ Support to private sector by creating better opportunities for investments in agriculture, livestock, marketing etc.
- ⇒ Support to access to credit

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<sup>8</sup> Block farming sees farmers within a specific agricultural area planting similar crops, a practice which simplifies crop management while encouraging the use of the most modern techniques, in order to produce high-quality crops, which can be sold commercially.

⇒ Support to creation and implementation of policies for better use of remittances in rural development.

In such a least-developed-rural areas of Lesotho, agriculture growth is necessarily considered the starting point for rural development and water supply for irrigation is an essential asset.

Development strategies and interventions should focus on a comprehensive concept of rural development, where crosscutting factors as environment and social-ecological aspects are of essential importance.

Reversing environmental degradation of natural resources through protective asset creation including terracing, reforestation and conservation of soil and water, in line with the integrated catchment approach managed by the Ministry of Forests Land and Reclamation (MFLR) of Lesotho is also significant for resilience of rural people.

According to Fabricius C., Gambiza J. and Shackleton C. – FAO Lesotho Emergency & Resilience Programme, March 2014: “Social-ecological systems concept – The resource base, resource users, their governance systems and institutions, public infrastructure and public infrastructure providers are all part of the same complex adaptive system, and constantly interact and influence each other. For example, local norms and practices interact with government policies and projects (governance systems and institutions). These are connected to officials, international agencies and NGOs (public infrastructure providers) who provide roads and water, resource centres, and support services (public infrastructure). Rangelands, crops, water and soil (the resource base) are positively or negatively affected by governance systems, institutions, public infrastructure, public infrastructure providers and of course the behaviour of farmers (the resource users). All these factors interact and influence each other, and these influences can change in many different directions over time”.

Based on the country context, FAO “Lesotho Emergency and Resilience Programme” has designed a mainstreaming adoption of Climate Smart Agriculture practices in order to acquire sustainable agricultural outcomes, as per the following mission statement: “To support Basotho increase their resilience and recover from food and agricultural emergencies through integrated sustainable agriculture and natural resources management”.

What has been done in terms of enhancing resilience of rural communities in Lesotho?

At the time of “Ground Water Project Implementation” (1982-1993), the following measures and means in support to resilience:

- Small-scale irrigation schemes. Although aquifers are generally low, once a borehole drilling was particularly successful, the yield was split partly for drinking water to villagers and partly for agricultural irrigation purposes. This helped farmers to diversifying crops and cultivating home gardens, rather than be limited to rain-fed crops.
- Roof catchment tanks. An integrative support of water supply was provided by the installation of galvanized steel tanks to collect rain from the roofs.
- Stone walls to mitigate erosion. Construction of stone walls around field areas were promoted in order to remove stones from cultivated areas and build protections to mitigate soil erosion. Particularly useful were stone walls to mitigate the gully erosion.

- Wind breaks. Tree planting as *wind breaks* on croplands and on hillsides to reduce soil erosion was promoted.

In more recent years, in response to food insecurity crisis in Lesotho FAO and Ministry of Agriculture and Food Security (MAFS) introduced agricultural technologies helping communities to adapt to environmental and social challenges, such as severe land degradation caused by overgrazing, deforestation and other poor land use practices. In particular, FAO “Lesotho Emergency and Resilience Programme” supports vulnerable farming households to improve and diversify their production, adapting to climate change through capacity development on conservation agriculture (CA)<sup>9</sup>, improved home gardening techniques, as well as nutrition awareness. CA involves sustainable agricultural methods based on three principles, which are linked to each other, namely:

1. Minimum mechanical disturbance of the soil (i.e. no tilling and direct planting of crop seeds);
2. Permanent organic soil cover;
3. Diversification of crop species grown in sequence and associations.

The practice, locally known as *likoti*<sup>10</sup> (hole, planting basins can be used without the need of tractor, draught animals or special equipment), also contributes to combating soil erosion and to enhancing fertility.

Soil erosion is a major problem in Lesotho affecting both the quality and quantity of harvests. By adopting CA, farmers not only ensure better harvests but also contribute to the improvement of soil quality and its preservation.

The socio-economic and environmental benefits help poor households to rehabilitate and strengthen their livelihood capital base and ultimately help rural communities to build system resilience.

In recent years, CA has been adopted in several African countries, showing a meaningful potential to enhancing rural livelihoods through sustainable production intensification. The benefits associated with its use include long-term yield increase and output stability, usually obtained by reducing inputs and costs as well as greater adaptability to climatic variability.

CA practices also help stop and reverse land degradation processes to facilitate rehabilitation and enhancement of the soil productive capacity (Kassam et al., 2009). Thus, compared to conventional tillage-based production systems, CA leads to higher net profitability, greater environmental sustainability and – especially important in Africa – higher food security.

The so-called *likoti* system is an agricultural technology supporting Basotho communities to increase productivity, to combat soil erosion and to adapt to climate change, building their resilience to better withstand future shocks.

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<sup>9</sup> CA is a concept for resource-saving agricultural crop production that strives to achieve acceptable profits together with high and sustained production levels while concurrently conserving the environment. Silici L. et al., FAO 2010.

<sup>10</sup> Source of data: Silici L., Ndabe P., Friedrich T., Kassam A. “Harnessing sustainability, resilience and productivity through conservation agriculture: the case of *likoti* in Lesotho”.

## 6. CONCLUSIONS

This paper examined linkages between migration in Lesotho and possible improvement of resilience of rural communities and returned home migrants through enhancement of rural development (particularly in water supply, agriculture and environment sectors).

Since 1975 Lesotho has been the dominant supplier of labour in South Africa. For decades about half the adult male population of Lesotho migrated on a temporary basis to work predominantly in the gold mines as well as in other sectors of the South African economy.

Since early 1990s, the number of Basotho migrant miners has declined drastically over the years, causing a dramatic drop in remittances and an increase of poverty rate among the households that depended on such incomes for their living.

In parallel, a number of factors, such as lack of arable land, lack of irrigation schemes and more in general scarce opportunities of wage employment and income generation activities, made the life conditions for the Basotho very severe, especially in rural areas.

The drop of remittances and underdevelopment of rural areas created an increased trend towards rural poverty and migration to urban areas or to South Africa in search of informal employment.

Due to scarce and worsening working conditions and to a pick in HIV/AIDS cases experienced by Lesotho migrants, women started migrating as main family earners, setting the basis for a progressive “feminization of the migration flow”.

As a result, unless policies and investments are put in place to foster a comprehensive development of rural areas, which includes agricultural productivity, improvement of marketing, creation of income and investments by the private sector etc., the decline of the rural economy will be accompanied by increased rural poverty and a consequent growing necessity to migrate.

Important challenges appear to be tackled in the next future if improvements of the past are to yield benefits for the rural areas. These challenges, briefly described above as “Potential actions aimed at rural development and at building resilience of Lesotho’s rural communities (section 5.1), might be summarized as general policy of interventions to foster resilience of people:

- Monitor, refine and formulate water policies and legislation for rural areas;
- Increase efforts to better serve both rural and urban/peri-urban areas through a variety of water projects and irrigation schemes;
- Support to smallholder farmers to improve food security and increase productivity, through improvement of irrigation and introduction of innovative technics (for example: water conservation technics, wind breaks, soil erosion protections, soil fertility, likoti, etc.);

- Support to private sector by creating better opportunities for investments in agriculture, livestock, marketing etc. aimed at diversifying into market-oriented agriculture for income opportunities;
- Support those crosscutting and interdisciplinary interventions aimed at rural development, gender support and environment;
- Implement and enhance policies for the best use of remittances, especially in light of supporting income generation activities.

Although Lesotho's economy continues to be dependent on migrant remittances, improvements of the living conditions in rural areas are needed to create a social and economic environment where potentially householders can develop income generation activities in their homelands.

In conclusion, on the basis of the analysis reported in this paper, in order to reduce the need to migrate and to contribute to poverty alleviation and a more resilient attitude, living conditions of rural people need to be supported through a comprehensive and multi-sector rural development, where improvement of water irrigation and agricultural growth constitutes two main pillars.

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