



How can agriculture contribute to youth employment?

INSIGHTS FOR A STRATEGY FOR SOUTHERN AFRICA

March 2017

Pierre Girard

Supported by



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

**Swiss Agency for Development
and Cooperation SDC**

Acknowledgements

This strategic paper has been supported by the Swiss Agency for Development and Cooperation (SDC). It is a contribution to the preparation of the new 2018-2022 SDC strategy for Southern Africa. It aims at helping SDC to identify relevant themes and critical issues to better take into account young people in its programs related to food security and agriculture in the region. The paper was written by Pierre Girard, PhD student at the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD, Art-Dev research Unit) and hosted by the Centre for the Study of Governance Innovation (GovInn) based at the University of Pretoria. The paper benefited from helpful discussions and suggestions from participants in the workshop organized by SDC in Harare, Zimbabwe, on 5 December 2016, gathering SDC staff, Professor Mandivamba Rukuni, Sara Mercandalli (CIRAD – GovInn) and Pierre Girard (CIRAD – GovInn). It also received valuable comments from Bruno Losch (CIRAD – GovInn), Sara Mercandalli (CIRAD – GovInn) and Sandrine Michel (University of Montpellier).

The views and opinions expressed in this strategic paper are those of the author and do not necessarily reflect the official policy or position of the Swiss Agency for Development and Cooperation SDC.

CONTENTS

ACKNOWLEDGEMENTS	3
CONTENTS.....	4
INTRODUCTION.....	6
SECTION 1. THE AFRICAN EMPLOYMENT CHALLENGE EMBEDDED IN THE DEMO-ECONOMIC TRANSITION OF THE CONTINENT	7
1.1 DEMOGRAPHIC DYNAMICS IN SOUTHERN AFRICA	7
1.1.1 <i>The starting point: Demographic transitions</i>	7
1.1.2 <i>The massive increase in population in SADC countries</i>	9
1.1.3 <i>An hypothetical demographic dividend</i>	11
1.1.4 <i>The majority of youth to remain living in rural areas</i>	11
1.2 A DISCUSSION OF ECONOMIC TRANSITION IN SSA: A PIVOTAL ROLE FOR THE AGRICULTURAL SECTOR AND RURAL AREAS	13
1.3 ACTIVITIES AND INCOMES OF RURAL HOUSEHOLDS.....	16
1.3.1 <i>The diversity of activities and incomes of rural households</i>	16
1.3.2 <i>Distribution of on-farm and off-farm incomes: The key factors</i>	17
1.3.3 <i>Migration dynamics: Remittances to changes in rural household strategies</i>	19
SECTION 2. SOUTHERN AFRICAN YOUTH: THE DRIVING FORCE SHAPING STRUCTURAL CHANGE	20
2.1 YOUTH: WHAT ARE WE TALKING ABOUT?	20
2.2 TODAY'S YOUTH: A WIND OF CHANGE?	24
2.2.1 <i>The best-educated generation</i>	24
2.2.2 <i>Changes in aspirations?</i>	25
2.3 YOUTH AS THE DRIVING FORCE OF STRUCTURAL CHANGE.....	26
SECTION 3. GENERATING ACTIVITIES FOR YOUTH IN THE AGRICULTURAL SECTOR	27
3.1 YOUTH AND AGRICULTURE: THE PARADOX.....	27
3.2 IS THERE ROOM FOR AGRICULTURE IN SOUTHERN AFRICA?.....	28
3.2.1 <i>Is Southern Africa land abundant?</i>	28
3.2.2 <i>Rising competition for land use</i>	29
3.2.3 <i>Limited profitability of agricultural activities</i>	31
3.3 CONSTRAINTS ON INVESTMENT BY YOUNG PEOPLE IN AGRICULTURE	32
3.3.1 <i>Capital accumulation tightened by the lack of welfare system</i>	32
3.3.2 <i>Getting a fairer share of returns from contributions to family activities</i>	33
3.3.3 <i>Accessing capital outside the family farm</i>	33
3.4 THE COMPLEXIFICATION OF LAND ACCESS MODALITIES FOR YOUNG PEOPLE.....	35
3.5 WHAT AGRICULTURAL TECHNICAL MODELS FOR GENERATING EMPLOYMENT?	36
3.6 THE AGRI-FOOD SYSTEM: HAS POTENTIAL BUT IS NOT KEY	38
SECTION 4. BUILDING BLOCKS FOR STRENGTHENING YOUTH EMPLOYMENT IN THE AGRICULTURAL SECTOR	40
4.1 ADVOCATING FOR TERRITORIAL PUBLIC POLICIES TO MEET THE YOUTH EMPLOYMENT CHALLENGE.....	40
4.2 MAKING AGRICULTURE MORE ATTRACTIVE	41
4.3 FACILITATING FAMILY INHERITANCE PROCESSES FOR YOUNG PEOPLE.....	42
4.4 INVOLVING YOUTH IN LOCAL RESOURCE GOVERNANCE SYSTEMS	43
4.5 IMPROVING INVESTMENT BY YOUNG PEOPLE IN AGRICULTURAL ACTIVITIES.....	44
4.6 TAILORING THE YOUTH EDUCATION AND TRAINING SYSTEMS TO THE NEEDS OF THE AGRICULTURAL SECTOR.....	45
4.7 SUPPORTING YOUNG PEOPLE TO ENGAGE IN AGRO-ECOLOGICAL PRODUCTION SYSTEMS	46
REFERENCES	47

List of figures, tables and boxes

Figure 1: The diversity of demographic transitions in Southern Africa.....	9
Figure 2 : Demographic change in selected regions and countries over two 40-year periods.....	9
Figure 3: Evolution of effective dependency ratio: Southern Africa versus other regions.....	11
Figure 4 : Evolution of rural and urban economically active populations in SADC countries (except South Africa, Mauritius and Seychelles).....	12
Figure 5: Stylised facts on structural transformation in SADC countries (1985 – 2010).....	14
Figure 6 : Employment structure in Sub-Saharan Africa in the early 2010s	15
Figure 7 : Classification of activities, incomes and employment status for rural households	17
Figure 8 : Stylised representation of the inverted U-shaped pattern of rural household income diversification	18
Figure 9: Youth employment by type of engagement, region and area of residence (% in total employment)	19
Figure 10 : Average years of schooling in SADC countries in 2010	24
Figure 11 : An approach to grasping youth related issues: Between the “Creative Youth” and the “Trapped Youth”	26
Figure 12 : Large-scale investments in some SADC countries.....	30
Figure 13 : Percentage of smallholders reporting that local customary authorities do not have land to allocate, by district in Zambia.....	31
Figure 14 : Evolution of agricultural labour productivity in SADC countries, except South Africa and diversifier countries.....	32
Figure 15 : Financial inclusion of the youth in certain Sub-Saharan countries	35
Figure 16 : Projected value of food markets in Sub-Saharan Africa.....	39
Table 1: Demographic changes in SADC countries over two 40-year periods (population in thousands)	8
Table 2: Yearly cohorts of young people (15-24) looking for income-generating activities in thousands	10
Table 3 : Employed and unemployed youth that would consider moving by area of residence and gender	20
Table 4 : Youth policies in SADC countries	23
Table 5 : Potential Agricultural Cropland (PAC) and Rural Population in SADC countries	29
Box 1 : Limits of a classical labour market approach in grasping the employment issue in Southern Africa	15
Box 2: What is the vision of youth upheld by national youth policies?	23
Box 3 : Is entrepreneurship the silver bullet for the youth?	27
Box 4 : Is Zambia really land abundant? A regional analysis for assessing land availability	31
Box 5 : A limited role for large-scale farms in employment generation	38
Box 6: Concrete approaches towards making agriculture more attractive to young people	42
Box 7: Concrete approaches for facilitating family inheritance processes	43
Box 8: Concrete approaches for involving the youth in local resource governance systems.....	44
Box 9 : Concrete approaches for improving investment by young people in agricultural activities	44
Box 10 : Concrete approaches for tailoring youth education and training systems to the needs of the agricultural sector	45
Box 11 : Concrete approaches for supporting young people to engage in agro-ecological models.....	46

Introduction

During the 1980s, “poverty” was the watchword of development stakeholders (donors, NGOs, researchers, etc.), putting the spotlight on economic growth, health and education as key drivers of poverty reduction (Oya & Pontara, 2015). Youth employment became a topic of discussion as attention became focused on the effects of the extended recessions, caused by the various currency and debt crises, on youth opportunities (Fox *et al.*, 2016). Striking events such as the ‘Arab Spring’ reaffirm perspectives on the threat of large numbers of unemployed and impoverished youth to prevailing political orders (Te Lintelo, 2012). Since the mid-2000s, several reports have been published by the African Development Bank (AfDB), the Organisation for Economic Cooperation and Development (OECD), the World Bank, the International Labour Organisation (ILO), and multiple donors and think-tanks. After the African Union (AU) published the African Youth Charter in 2006, many African countries launched programmes targeting the youth.

In the agricultural sector particularly, the New Partnership for Africa’s Development (NEPAD) published several strategic papers on youth employment challenges in agriculture, and the issue is part of the Comprehensive Africa Agriculture Development Programme (CAADP). However, even though the Southern African Development Community (SADC) mentioned the youth employment issue in its most recent strategic report, the organisation gives priority to industrialisation for structural transformation in the region. This myriad of continental strategies has often been complemented by bilateral and NGO donor-funded programmes (Fox *et al.*, 2016), suggesting different visions to promote youth employment (AfDB *et al.*, 2012). Thus, “youth employment” has become one of the new watchwords of the development community, with every stakeholder suggesting its vision of the issue. In this strategic paper, the youth employment issue is considered as fully embedded in the demo-economic transition of Southern Africa.

Indeed, most of the Southern African countries have slowly begun their demographic transition, and they should be able to reap the benefits of their demographic dividend if they can stimulate economic development and facilitate the generation of enough jobs. What is specific to Southern Africa, and more broadly Sub-Saharan Africa, is that a large part of the workforce remains in rural areas giving this a central role in rural livelihoods; and agriculture together with the informal urban economy are the major contributors to the GDP and major employers of the economically active population. The challenge of youth employment must also be set in the broader framework of the ongoing food security issue in the region, as well as environmental concerns such as climate change, which are more critical than ever. The newcomers will have to deal with these issues and will have to be taken into account in the generation of solutions.

This paper is structured as follows: Section 1 gives an overview of employment and structural change in Southern Africa. The objective is to highlight the unique Southern African demo-economic pathway, differences among countries, and the remaining role for agriculture in most of them. Section 2 reveals how the youth are the driving force within productive structures shaping structural change. Section 3 then looks at the potential of the agricultural sector in terms of generating youth activities. Section 4 contributes to the SDC’s 2018-2022 strategy by suggesting concrete entry points and possible plans of action to strengthen the integration of rural youth in the agricultural sector. Some of these are concrete measures that could be part of future SDC programmes, while others are more policy based and intended to provide key elements for the strategic discussions on youth employment issues that the SDC may have with Southern African governments.

Section 1. The African employment challenge embedded in the demographic transition of the continent

The Southern African Development Community¹ is situated on the huge African continent and is the geographic area covered by this strategic paper. In this report, the term SADC countries or Southern African countries is used to refer to the area². For certain data, the report refers more broadly to Sub-Saharan Africa. North Africa, which displays specific dynamics, is not referred to in this paper.

1.1 Demographic dynamics in Southern Africa

Southern African countries, and more broadly Sub-Saharan African countries, are facing a huge increase in population. The continuing population growth is not a new phenomenon on this continent, but the burning issue here is the massive change in scale and its supposed impact on the sustainability of the productive system.

1.1.1 The starting point: Demographic transitions

Incomplete demographic transitions are the starting point of the huge increase in population. Every country is supposed to tackle this population phenomenon. The first phase of a demographic transition is characterised by a decrease in mortality rate and the maintenance of a high fertility rate, resulting in a rapidly growing population. During the second phase, the fertility rate declines and population growth slows down. In Southern Africa, depending on the country, demographic transitions are at different steps (Figure 1 and Table 1):

- Ancient transitions: Countries having started their transition several decades ago where the gap between the crude birth rate and the crude death rate is narrow, and so is the increase in population. This state is partly due to the decrease in fertility rate which is less than three children per woman nowadays.
- Recent transitions: Countries having engaged in their transition during the 1970-1980s where the gap between crude birth and death rates is now quite small. In such countries, the number of children per woman is between three and four from 2010 onwards. The decrease in fertility rate is especially due to birth control policy;
- Delayed transitions: countries where the death rate decrease has been on track some decades ago but where the fertility rate is still high (comprised between five and seven children per women) and the latter decreases very slowly. The gap between the crude birth and death rates is high in the 2010s; and so the rise in inhabitants. Last but not least, this last cluster of countries drives demographic dynamics in SADC countries because it represents 75 % of SADC population in 2015.

¹ List of SADC countries: Angola, Botswana, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, Zimbabwe

² Not to be mistaken with the United Nations' definition of Southern Africa, which includes only Botswana, Lesotho, Namibia, Swaziland and South Africa

	1975	2015	2055	Increase 75-15	Increase 15-55	Step in the demographic transition*
Angola	7 107	25 022	72 905	17 915	47 883	D
Botswana	822	2 262	3 492	1 440	1 230	R
Democratic Republic of the Congo	22 902	77 267	216 046	54 365	138 779	D
Lesotho	1 149	2 135	3 107	986	972	D
Madagascar	7 576	24 235	60 597	16 660	36 362	D
Malawi	5 293	17 215	47 810	11 922	30 595	D
Mauritius	892	1 273	1 222	381	- 51	A
Mozambique	10 405	27 978	72 293	17 573	44 315	D
Namibia	906	2 459	4 560	1 553	2 102	D
Seychelles	60	96	98	37	1	D
South Africa	25 699	54 490	66 493	28 792	12 003	A
Swaziland	517	1 287	1 857	770	570	R
United Republic of Tanzania	15 980	53 470	152 692	37 490	99 222	D
Zambia	4 983	16 212	48 282	11 229	32 070	D
Zimbabwe	6 170	15 603	31 472	9 432	15 869	R
SADC Countries	110 461	321 006	782 926	210 544	461 921	

*A: Ancient transition; R: Recent transition; D: Delayed transition

Table 1: Demographic changes in SADC countries over two 40-year periods (population in thousands)

Source: Author's calculations from WPP (2015)³

A specificity of Southern African countries compared with others African countries is the HIV epidemic which had a very strong effect on the crude death rate in the 1990s, especially in Zambia and Zimbabwe. The effects of HIV on demographic dynamics are serious, including a ten-year loss in life expectancy (from 50 to 40 years old), and a massive increase in Aids orphans comprising a substantial part of today's youth in those countries.

³ Dataset: United Nations D.o.E.a.S.A., Population Division (2015), World Population Prospects, the 2015 Revision: <https://esa.un.org/unpd/wpp/>. In this paper, all forecasting calculations using the World Population Prospects database are done on the medium variant fertility hypothesis.

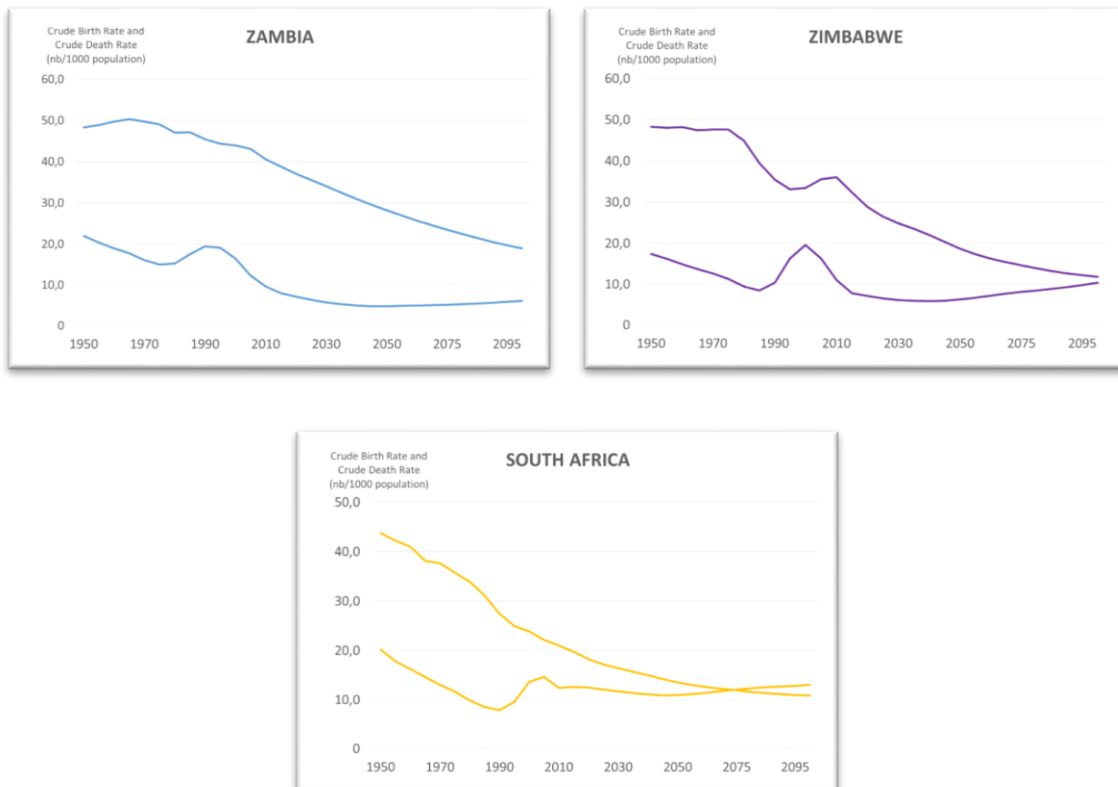


Figure 1: The diversity of demographic transitions in Southern Africa

Source: Author's calculations from WPP (2015)

1.1.2 The massive increase in population in SADC countries

Slowly engaged demographic transitions lead to a massive increase in population. As exposed on Figure 2, Southern Africa, and more broadly Sub-Saharan Africa, is the only region in the world where the increase will be higher in the next 40 years than in the past 40 years.

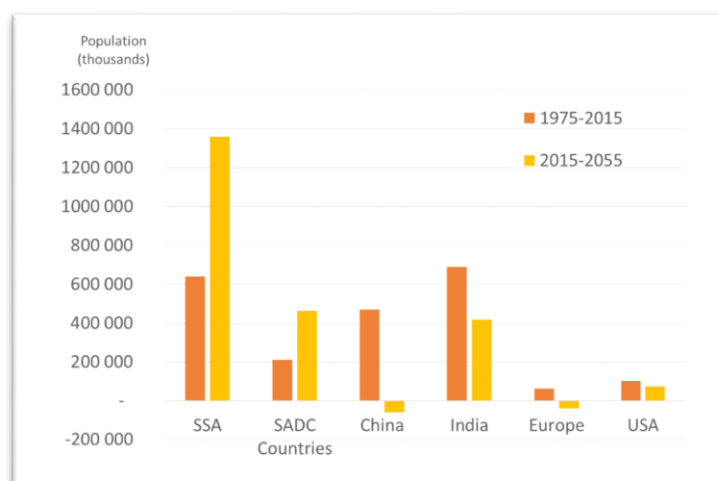


Figure 2 : Demographic change in selected regions and countries over two 40-year periods

Sources: Author's calculations from Losch (2016a) and WPP (2015)

The surge will be twice as large as for the previous period in Southern Africa: around 200 million people over the past 40 years and estimated to rise to more than 400 million over the next 40 years. However, the situation is mixed according to SADC countries. As Table 1 shows, demographic dynamics are strongly driven by northern SADC countries such as the DRC, Tanzania, Angola, Mozambique, Zambia, Malawi and Madagascar. Aside from South Africa, which is very particular, the southern SADC countries are not facing a significant increase in population.

The cohorts of young people looking for income-generating activities are increasing year by year. In Southern African countries, 6.3 million newcomers sought income generating activities in 2015 and this figure is set to rise to 9.2 million in 2030. As displayed in the Table 2, the cohort size will rise by 50% in the most populated Southern African countries. Since the young people looking for income-generating activities in 2030 have already been born, these numbers are not contingent foresights.

	2015	2030	Increase
Angola	487	807	66%
Botswana	44	50	14%
DRC	1 504	2 442	62%
Lesotho	49	50	3%
Madagascar	498	694	39%
Malawi	355	543	53%
Mauritius	20	15	-26%
Mozambique	560	867	55%
Namibia	52	62	20%
Seychelles	1	2	10%
South Africa	1 054	1 061	1%
Swaziland	30	32	7%
Tanzania	1 026	1 695	65%
Zambia	325	513	58%
Zimbabwe	326	447	37%
SADC Countries	6 331	9 281	47%

Table 2: Yearly cohorts⁴ of young people (15-24) looking for income-generating activities in thousands

Sources: Author's calculations from Losch (2016a) and WPP (2015)

⁴The annual cohort corresponds to one-tenth of the age group 15-24 years. This is the flow entering the working age group (15-64), and differs from the change in the group's size, which also takes into account people entering the supposedly non-working group of 64+ years. The absolute increase in the age group 15-64 years is less precise, because many people continue to work after the age of 64 in countries without a formal labour market or generalised pension system, as is the case in SSA. The age group 15-24 years obviously includes youth attending school or students, but it can be assumed that they will start to work or look for a job or an income-generating activity between the ages of 15 and 24, depending on their access to the education system. Taking one-fifth of the age group 20-24 years does not, in any event, change the size of the yearly cohort significantly (Losch, 2016a. A structural transformation to boost youth labour demand in Sub-Saharan Africa: The role of agriculture, rural areas and territorial development. Working Paper No. 204. Geneva: ILO, p. 80.)

1.1.3 An hypothetical demographic dividend

The demographic dividend is a unique moment in the demo-economic story of a country when the number of active and inactive people respectively stands at its higher and lower levels. According to Filmer *et al.* (2014), the number of working age adults relative to dependants in Sub-Saharan Africa will rise from just around one in 1985 to close to 1.7 in 2050. This window of opportunity where fewer dependants mean an increase in the level of income and allow an opportunity for savings and investments (in education, health, etc.) with more workers raising the potential for production. In Southern Africa, the progressive improvement in the effective dependency ratio⁵ over the coming decades could be a major advantage in terms of growth. However, despite broad talk of a demographic dividend, current projections suggest that this is unlikely to be realised soon (Fox *et al.*, 2016). Secondly, as established on the Figure 3, the significance in size of the Southern African (and sub-Saharan African) dividend will be smaller than in other regions, particularly East Asia⁶, for two reasons (Losch, 2016a): The convergence of Southern Africa with the rest of the world in terms of fertility reduction is lagging, and the improvement in life expectancy will result in an increase in the number of elderly people. Moreover, the dividend will only be effective if economic conditions enable full use of the additional labour force (Pesche *et al.*, 2016), and because of the sheer numbers of children projected to be educated over the next 20 years, the education system remains a major challenge.

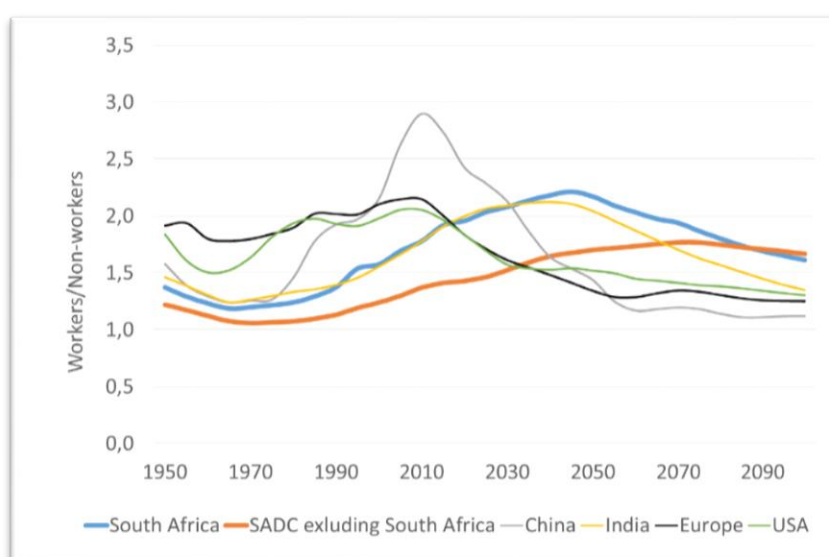


Figure 3: Evolution of effective dependency ratio: Southern Africa versus other regions

Source: Author's calculations from WPP (2015)

1.1.4 The majority of youth to remain living in rural areas

What is specific to Southern Africa and widespread in Sub-Saharan Africa is the fact that a large proportion of the young people will continue to live in rural areas (including small towns) in future, and therefore their livelihoods will mostly rely on the rural economy (Fox *et al.*, 2016; Losch, 2016a); (Yeboah & Jayne, 2016). Urban and educated youth, despite being the most visible, in fact represent a

⁵ The dependency ratio is equal to the number of individuals aged below 15 or above 64 years divided by the number of individuals aged 15 to 64 years, expressed as a percentage.

⁶ Thailand is an example of a country that has succeeded in using its demographic dividend.

smaller share. By 2040, the rural economically active population is expected to remain above 50%. While this forecast should be interpreted with caution, notably due to the various definitions of “rural” and “urban”, as well as rapidly changing dynamics that blur the borders between those categories, a general trend towards a significant increase in the “rural” population is to be expected (AfDB *et al.*, 2015; Potts, 2012)⁷.

Whereas it is widely believed that urbanisation is occurring faster in Sub-Saharan Africa than anywhere else in the world, the urbanisation rate has slowed down when compared to the 1960s and 1970s: urban growth is now mainly due to natural growth of the urban population and not rural-urban migration (Potts, 2012). Rapid population growth in a capital can be counteracted by slower growth in other towns: in Malawi and Uganda, urbanisation rates are around 1% instead of the usually admitted rate of 3-4%. (De Brauw *et al.*, 2014) found that the rural-urban migration rate in Sub-Saharan Africa was 1.07% per annum between 1990 and 2000.

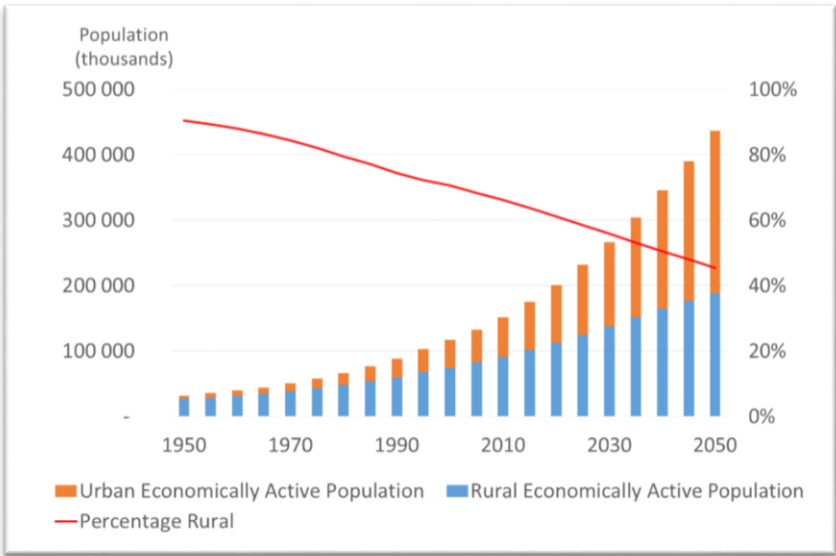


Figure 4 : Evolution of rural and urban economically active populations in SADC countries (except South Africa, Mauritius and Seychelles)

Source: Author’s calculations WPP (2015)

These lower urbanisation rates are not synonymous with lesser links between rural and urban areas. On the contrary, the finding is of a densification of rural-urban linkages through circular migrations (defined as migration into an urban or rural town or city and then, at some point, which could be one year, movement out of the town or city) (AfDB *et al.*, 2015; Mercandalli, 2015; Potts, 2013). Hence, the static categories of “rural” and “urban” no longer grasp the appearance of hybrid socio-economic behaviours related to intensifying and diversifying rural-urban migration patterns (Pesche *et al.*, 2016).

⁷ According to the United Nations D.o.E.a.S.A., Population Division. (2014) World Urbanization Prospects: The 2014 Revision Highlights. pp. 32.: “The urban definition employed by national statistical offices varies widely across countries, and in some cases has changed over time within a country, and may be based on one or a combination of characteristics, such as: a minimum population threshold; population density; proportion employed in non-agricultural sectors; the presence of infrastructure such as paved roads, electricity, piped water or sewers; and the presence of education or health services.”

1.2 A discussion of economic transition in SSA: A pivotal role for the agricultural sector and rural areas

Considering the demographic dynamics described above, current economic growth seems insufficient to face the employment challenge (AfDB *et al.*, 2012). Despite 15 years of relatively rapid economic growth averaging more than 4.5 % per year, almost all African countries still depend on primary commodities for their exports (Filmer & Fox, 2014; Losch, 2016a). In many parts of the world, the same mechanism and the concentration of growth in capital-intensive enclaves can help to explain “jobless growth” and the ineffective calls for making it more “inclusive.” (Haddad *et al.*, 2015). Lastly, the GDP indicator is often underlying an evolutionary vision of socio-economic development - a vision that is being increasingly questioned (Fioramonti, 2013; Losch, 2016a).

Hence, beyond the GDP prism, a stylised summary of economic transitions in the world story is the gradual transition from an agriculture-based economy to one based on industry and then on services, concomitant with a shift from rural to urban areas (which is a historical reinterpretation of what initially happened in Great Britain (Mounier, 2016) and then in several other regions of the world). However, African stylised facts bring into question this mainstream historical view on economic transition. In 2010, the agricultural employment share was still around 50 %, while the manufacturing employment share fell from 8.9 % in 1990 to 8.3 % in 2010 (De Vries *et al.*, 2015). Instead of being absorbed by manufacturers, workers who were moving out of agriculture became engrossed in informal market service sectors. Beyond this global picture, Africa exhibits much heterogeneity in terms of sectoral distribution of the labour force and contribution to the GDP (McMillan *et al.*, 2014).

In order to grasp this diversity, the Figure 5 is a relevant way to get an idea of the importance of agriculture in GDP and the occupation of the population. On the graph, each curve displays the percentage of the active population working in agriculture and the share of agriculture in the global GDP between 1985 and 2010. From this representation, four clusters of countries appear:

- Agriculture-based countries (Malawi, Mozambique, Madagascar, DRC and Tanzania) where agriculture is the main occupation for 70-80% of the active population and where agriculture represents around 30% of the GDP.
- Mining / oil-based countries (Zambia, Zimbabwe and Angola) where agriculture still employs a large part of the population, but contributes less to the GDP (less than 20 %).
- Diversifiers (Botswana, Lesotho, Swaziland and Namibia) where agricultural workers account for less than 50 % of the active population and agriculture contributes less than 10 % of the GDP.
- Diversified (South Africa) where agriculture contributes less than 5 % in terms of both workers and contribution to the GDP.

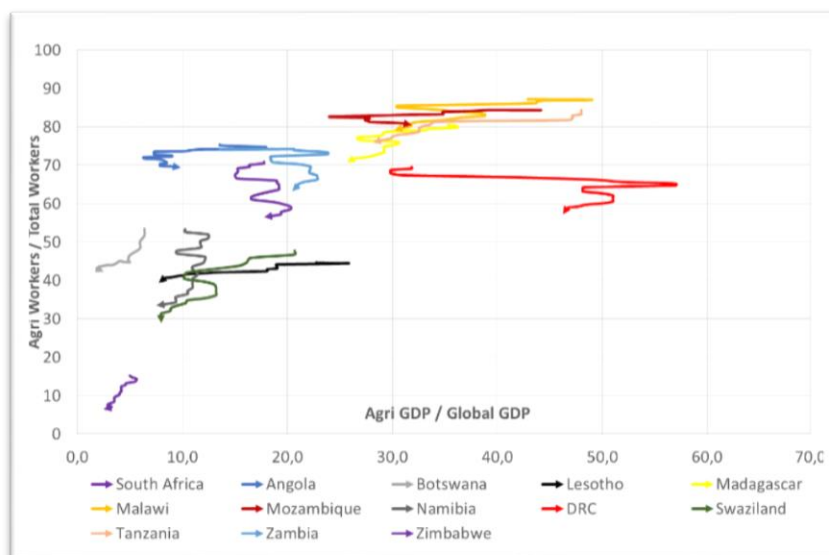


Figure 5: Stylised facts on structural transformation in SADC countries (1985 – 2010)

Source: Author's calculations from WDI (2014), FAO (2011) and AfDB et al. (2015)

Hence, farming remains the single largest employment category, even for the resource-based countries. For most countries, the second sector of employment is the service-related sector. This statement is confirmed by the structure of employment in sub-Saharan Africa (see Figure 6) (Filmer & Fox, 2014):

- Firstly, the formal sector remains the exception on the continent. In fact, only 16 % of those in the workforce have formal wage employment.
- Secondly, the industrial sector accounts for less than 20 % of wage jobs, thus 3 % of total employment.
- Lastly, the remaining jobs are either on family farms (62 %) or in household enterprises (22 %), which may both be described as the informal sector.

Within the informal sector, three kinds of employment status stand out (also see Box 1):

- Self-employment if a person carries out an activity using his/her means of production and labour to provide a service or sell a good and get something in return.
- Family work if a person works in an economic enterprise operated by a household member. In most cases, the work is low paid in cash if at all.
- Informal wage employment if a person works for another person or entity in exchange for any compensation, whether in kind or cash. Unlike formal wage employment, informal wage employment is not entitled to social security. The size of this particular category depends on the extent of capitalism penetration and socio-economic differentiation in rural areas which are too often underestimated in statistics (Oya, 2010).

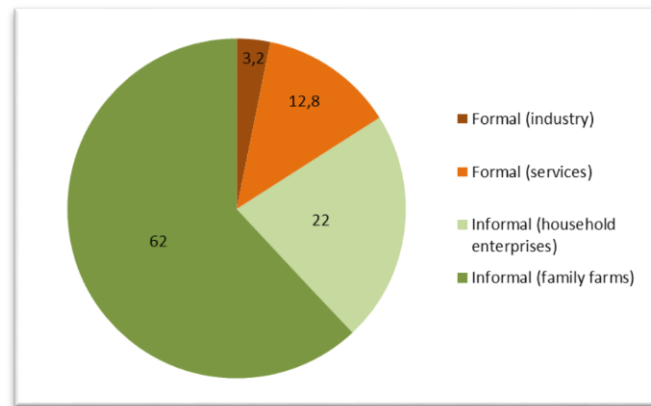


Figure 6 : Employment structure in Sub-Saharan Africa in the early 2010s

Sources: Losch (2016a)

Due to this overwhelming share of rural activities and agriculture in the GDP and the population occupation, many academics and scholars support the idea that agriculture will remain central to structural transformation in Southern Africa, and more broadly in Sub-Saharan Africa (Losch, 2016b). Thus, the interest in putting agriculture at the centre is also in terms of same growth rate, with the agricultural sector creating more employment than industry or services. (Thurlow, 2015) demonstrated that employment/growth elasticity is higher in agriculture (0.47) than in services (0.34) and in industry (0.30). There is a large consensus on the fact that the agricultural multiplier coefficient is above 1, especially in non-merchant economies, such as Southern Africa (Timmer, 2009).

Box 1 : Limits of a classical labour market approach in grasping the employment issue in Southern Africa

Employment is a field research traditionally dominated by classical labour market studies. Below is a summary of some limits of classical labour market approaches for assessing employment in sub-Saharan Africa.

Irrelevancy of the unemployment indicator

The notion of unemployment depends on the social organisation of the economy. (Marchand & Thélot, 1999) hold two conditions for using the unemployment concept: social work time intended to provide income and domestic work time for the direct satisfaction of the needs of the family must be tiered, and the social work must be the object of a market exchange. In Southern African countries, social and domestic spheres of labour are broadly intertwined. Moreover, working outside the domestic sphere does not necessarily result in payment (for instance, exchanges of labour between farms or participation in collective work of social interest).

Looking at official statistics, unemployment rates in developing countries are much lower than in developed countries. However, these low rates do not mean that employment problems do not exist in these countries. Rather, in the absence of any form of social protection guaranteed by the State, being unemployed is a luxury that poor people cannot afford: the search for a job is not without cost and depends on the ability of the prospector to finance a period of unemployment from his/her personal savings or through the support of family or friends (Dimova & Nordman, 2014). In the end, the unemployment rate is a better indicator for groups with a high-school degree or higher, waiting for a job offer in the formal segment of the economy. However, in terms of numbers, they represent a minority.

Relevance of the underemployment indicator

Instead of using unemployment, the underemployment indicator fits best with Sub-Saharan African labour dynamics. According to ILO, underemployment reflects the underutilisation of the productive capacity of the employed population. Underemployment can refer to an insufficient quantity of “working time” (the latter depending on sectors, countries, and cultures, and not easy to define) given the people capacity. Alternatively, underemployment is associated with a low labour productivity (Phélinas, 2014).

Labour statistics do not reflect labour dynamics in Sub-Saharan Africa (Oya & Pontara, 2015) (Phélinas, 2014)

Given the diversity and complexity of employment on the continent, the outcomes of current labour surveys (as labour force surveys modelled by ILO) are not relevant due to methodological limits.

Firstly, the notion of “main-job holding” designed to give a single classification for every individual surveyed and the ‘reference period’ (a seven-day reference period) can lead to significant statistical biases in African contexts where occupation multiplicity, irregularity, and strong seasonality exist. Multiple biases are at play for both respondents and enumerators.

Secondly, the concept of employment status and the distinction between wage employment and self-employment are often treated superficially. Informal employment is often classified as “self-employment” whereas it is, in reality, part of a disguised form of wage labour. Certain types of jobs, characterised by severely exploitative conditions, are highly stigmatised and can be underreported and overlooked.

Thirdly, the definition of households is blurred in rural areas marked by high personal mobility. Labour surveys use a narrow definition of households that excludes those who are absent. This definition is problematic in the case of circular migration, where household members may be absent for extended periods of time but retain financial links to the household. Moreover, the labour market approach does not take into account domestic activities that contribute to the reproduction of rural livelihoods.

Given this specific structure of labour markets in Sub-Saharan Africa, the impact of targeted policies, programmes or projects is limited. Indeed, interventions like wage subsidies (provided upon hiring an entitled unemployed worker during a specified period) or counselling and job-search training will concern very few people, mostly in urban areas.

1.3 Activities and incomes of rural households

1.3.1 The diversity of activities and incomes of rural households

In Southern Africa, as on the entire continent, rural households engage in a variety of activities and benefit from the related incomes (see Figure 7) (Bélières *et al.*, 2015; Losch *et al.*, 2012):

- On-farm activities include crop and livestock production, on-farm processing of products, and earnings from hunting, fishing, and gathering of natural resources.
- Off-farm activities include all activities conducted and incomes generated away from the family farm, regardless of the sector or status.

- Non-farm activities include all activities other than agricultural activities whatever the location (countryside or cities) and the employment status. Non-farm and off-farm activities may induce migrations and migrant remittances.

Aside from these activities, rural households' incomes may also be constituted by private transfers (migrant remittances), public transfers (like those from social protection, although very limited in most Southern African countries – see below) and rents (especially land rentals).

While it is asserted that the agricultural sector remains the single largest employment category for rural households (family farms and households enterprises), the prevalence of occupational diversification of rural households has been broadly assessed over the past 30 years in Sub-Saharan Africa (Ellis, 2004). The evidence is that around 40% of African rural household incomes are non-farm earnings (including own non-farm businesses, wage employment, transfers and remittances) (Bryceson, 1996; Haggblade *et al.*, 2007). Due to the importance of mining activities in certain Southern African countries, non-farm earnings may constitute 80-90% of rural household incomes in the region (Ellis, 1999).

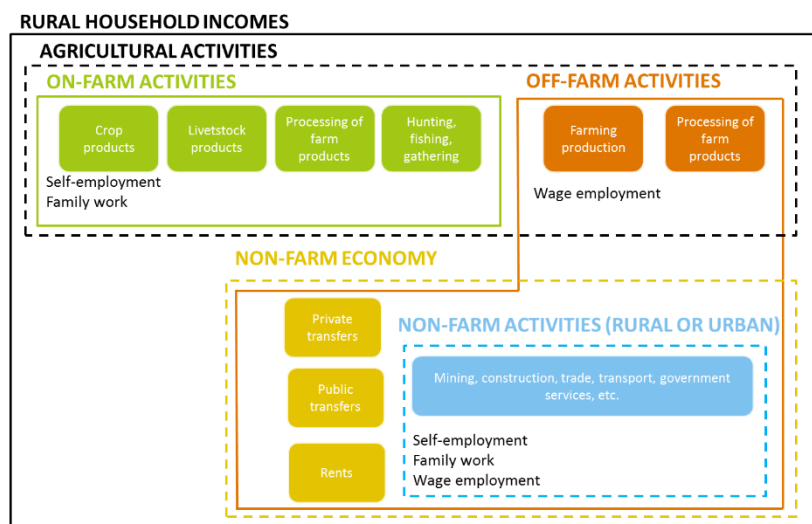


Figure 7 : Classification of activities, incomes and employment status for rural households

Source: Adapted from Losch *et al.* (2012)

1.3.2 Distribution of on-farm and off-farm incomes: The key factors

As demonstrated by the RuralStruct programme in Senegal, Mali, Kenya and Madagascar (Losch *et al.*, 2012), around 95% of rural households are engaged in agriculture with only a few households engaged in non-farm activities only. Farming remains the backbone of rural households, but the level of income from this activity varies greatly according to the context. Many scholars assert that activity diversification strategies are built from a strong agricultural sector (Proctor & Lucchesi, 2012) – what is also known as “pull” strategy; diversification as an opportunity to invest accumulated capital through farming (Tacoli, 2004). Higher agricultural productivity leads to more non-farm activities, while non-farm incomes increase the demand for agricultural goods (Haggblade *et al.*, 2007). Agricultural capital accumulation is even more relevant in regions where high-value crops are cultivated allowing for “quick money” that can be invested in farm or non-farm activities (Okali & Sumberg, 2012). Due to the difficulty of engaging in agriculture in certain contexts (high pressure on the land, climate change, low returns and urban/rural income gap), rural households have no other alternative but to engage in non-farm activities – what is also referred to as a “push” strategy.

Beyond a “push-pull” approach, diversification and capital accumulation patterns depend on the conditions of agricultural activity and the rural context (Ellis, 2004), as well as the agrarian story of the region in the long term (Cochet, 2015). As demonstrated by Losch *et al.* (2012) (see Figure 8), at very low income levels, diversification is uncommon because households have no choice but to engage in farming. As incomes grow, households begin to diversify their activities and the process continues to the point at which households develop a good enough wealth and asset base to be able to earn sufficient returns through specialisation (into different activities, whether on-farm or not) to meet their basic needs and manage their risks. In rural areas, the process of specialisation at the final stage of the inverted U path occurs mainly in agriculture, while specialisation in other economic activities is observed less frequently.

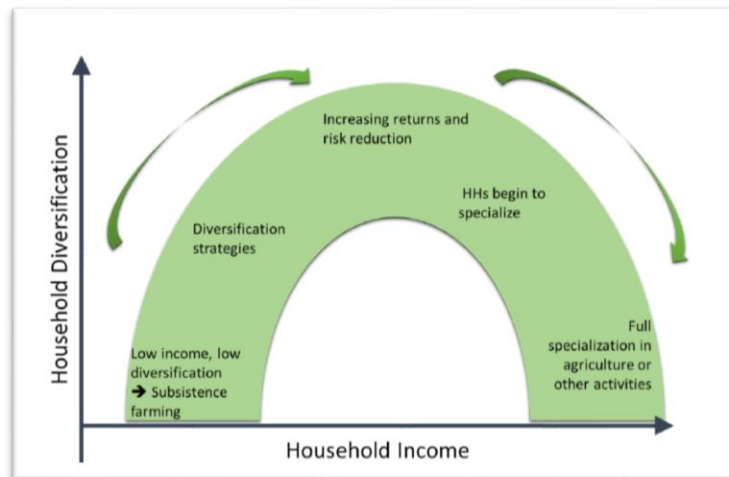


Figure 8 : Stylised representation of the inverted U-shaped pattern of rural household income diversification

Source: Losch et al. (2012)

During the first phase, rural non-farm opportunities may not yet be as plentiful and in most cases are still limited to the informal provision of petty services contributing to vulnerable jobs (see Figure 9): increase in income and accumulation of wealth as a result of livelihood diversification affects a minority of smallholders in rural SSA (Alobo Loison, 2015). The process mainly involves relatively better-off farmers with sufficient assets, while the poor are more likely to remain at the beginning of the U-inverted curve due to high entry barrier costs. The poorest people with few agricultural means have no other choice but to work as wage employees engaged in farm or non-farm activities as a subsistence strategy and the option is quite limited for boosting investment because of very low capital accumulation (Cramer *et al.*, 2015) (Oya & Pontara, 2015).

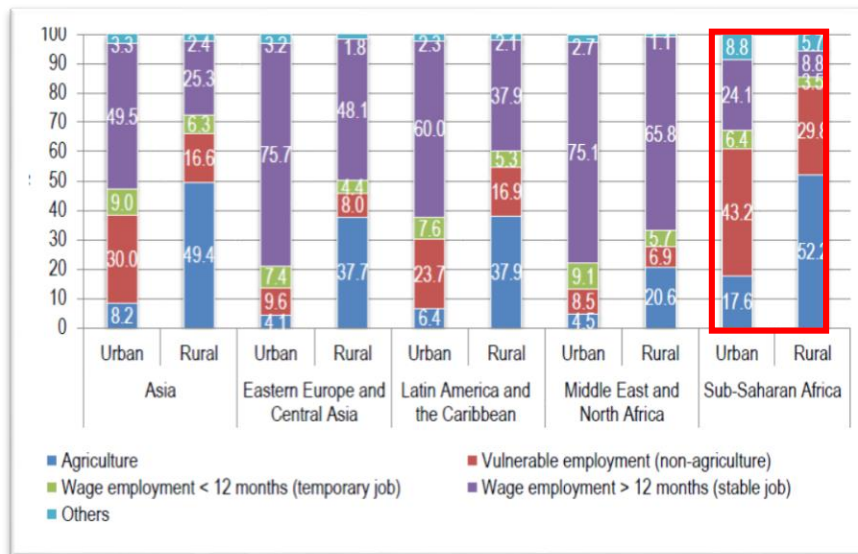


Figure 9: Youth employment by type of engagement, region and area of residence (% in total employment)

Source: Elder et al. (2015)

1.3.3 Migration dynamics: Remittances to changes in rural household strategies

International migrations have been a growing issue in development studies owing primarily to the impact of remittances accounting for more international capital flows than does official overseas development assistance (ODA). According to UNDESA (2016), the number of international migrants reached 244 million in 2015 (a 41% increase since 2000), of which 34 million were from Africa. More than one out of every two international migrants migrated within Africa. However, this overall figure masks sharp differences: while North Africans migrate outside the continent (90%), Sub-Saharan Africans move first within Africa (nearly 75%) and to neighbouring countries and it is eased by the porous nature of borders resulting from the expansion over time of family networks boosted by improved infrastructures and communication networks (Mercandalli & Nshimbi, 2016). Migrations in Southern Africa are particularly dynamic and South Africa is the country receiving the higher number of migrants in SSA (UN-DESA, 2016).

The UNDESA database gives a flawed global picture on international residential migration, since it captures neither the increasing undocumented migration nor the significant dynamics of circular or non-residential migrations between and within countries. As already mentioned above, Sub-Saharan Africa has a long tradition of circular migration (including return migration or oscillating migration), making it very difficult to detect or measure patterns of population settlement change over time. As underlined by Potts (2013), a picture emerges of a significant shift in migration trends from about the 1980s to the early 2000s: Rural-urban migrations are no more definitive, and circular migration is a very frequent phenomenon⁸.

To complete this framework, last but not least, young people are more prone to migrate. Indeed, one third of total migrants from developing countries are aged 12 to 24 years and young people are estimated to be 40 % more likely to move from rural to urban areas or across urban areas than older

⁸ See the in-depth study on Zimbabwe Potts D. (2010) Circular migration in Zimbabwe and contemporary Sub-Saharan Africa *Boydell & Brewer*. pp. 312.

people (Fares *et al.*, 2006). International African migrants are the youngest in the world (averaging 29 years of age) and SSA hosts the highest proportion of young persons among all international migrants (34 %). Looking more specifically at the rural youth in Sub-Saharan Africa and their willingness to move, either within their own country or to a neighbouring country, the numbers are much higher (see

Table 3); with 66 % of employed youth and 50 % unemployed youth considering moving. Although the proportion of migrant women is steadily increasing in the region, the share is a bit less for rural women, perhaps due to stronger social constraints.

	Employed youth				Unemployed youth			
	Urban		Rural		Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	Female
Asia	24.8	16.9	34.0	22.6	46.3	27.8	60.7	38.1
Eastern Europe and Central Asia	29.5	23.3	38.0	28.4	49.7	37.1	49.4	39.4
Latin America and the Caribbean	65.7	62.2	67.0	63.4	70.5	71.4	76.5	72.5
Middle East and North Africa	23.8	10.6	28.5	13.0	27.6	9.1	33.8	11.8
Sub-Saharan Africa	48.5	41.9	50.0	42.9	69.2	56.4	65.9	63.0
Total	38.5	31.0	43.5	34.0	52.6	40.4	57.2	45.0

Table 3 : Employed and unemployed youth that would consider moving by area of residence and gender

Source: Elder *et al.* (2015)

The amount of remittances is still difficult to enumerate, especially informal remittances that are often underestimated, but their significance depends on the type of migration (long term or short term) and the destination (national or international, to high-income countries or neighbouring countries)(Mercandalli & Nshimbi, 2016). In most rural settings, local business and wage income account for the majority of non-farm earnings, while remittances and transfers typically account for 15-20% of non-agricultural rural income and 5-10% of total rural income (Haggblade *et al.*, 2010). However, in the mining economies of Southern Africa, remittances from migrant mining workers may account for as much as half of all rural household income(Ellis, 1999; Haggblade *et al.*, 2010). For instance, in the southern Mozambican region, where the proximity of mining activities generates massive migration and significant transfers, remittances are the major source of income for 75% of rural households (De Vletter, 2007).

The relative consistency of remittances, experienced in many countries is a factor that is likely to have altered rural households' strategies (Carletto *et al.*, 2007). Beyond the phenomenon of remittances, in relation to the renewed diversity of migration patterns and related rules and socio-economic decisions set by the family in respect of their different assets, migrations are shaping economic diversification opportunities and differentiation within rural communities (Mercandalli, 2015).

Section 2. Southern African youth: The driving force shaping structural change

2.1 Youth: What are we talking about?

For statistical purposes, international institutions, governments and mainstream economists often define youth on the basis of biological age. For instance, the ILO and UN use the bracket range 15-24 years: young people under 15 fall under the ILO's child labor convention and should not be working,

while young people aged above 24 years are considered adults. Admittedly, in most systems, young people may have concluded secondary and tertiary education at this age and may have entered into the workforce. For the African Union and most African countries, the bracket range is 15-35 years. However, in some Southern African countries, HIV impacted so strongly on life expectancy at the end of the 1990s (with life expectancy reaching around 40 years) that using this definition results in the duration of adulthood being very short. Thus, even if age is the perfect statistical variable, being universal and timeless, quantitative, mathematically natural and available as such in all comparisons and all calculations, being a youth is not a matter of biology or statistics (Chauveau, 2005; Mauger, 2010). In addition, the statistical approach on which many programmes, projects and initiatives are based tends to consider the youth as being disconnected from their social context (Chauveau, 2005; Losch, 2016a). Hence, in terms of grasping the diversity and complexity of youth, considering youth as a period of transition between childhood and adulthood is more relevant.

A restrictive vision of this transition is the school-to-work transition often used in labour market approaches, where the achievement of a successful transition depends on the quality of schooling, the matching between schooling and labour market demands, economic opportunities, the protection of workers' rights and the prevention of abuse (Elder *et al.*, 2015). The school-to-work transition is often normative and linear and induces deterministic models of transition based on a progression from educational achievement to employment, out of economic dependency. In a context where a large proportion of children do not go to school for a long period of time, focusing only on school-to-work is not sufficient.

Another stream in the literature emphasises on the transition as the gaining of adult responsibilities and rights, the acquisition of political awareness, and the formation of a critique point of view on the context in which they live (Honwana, 2012). For these scholars, youth is a suspension period called the youth's "waithood" during which young people are not just sitting and waiting for their elders or the government to do something. On the contrary, the youth are considered to be creative and capable of conquering innovative spaces for action (Honwana, 2012). In this case, young people use their agency and creativity to fashion new "youthscapes" or sub-cultures with alternative forms of livelihood and social relationships in the borders of mainstream society. The underlying theory of this approach is based on the concept of "social agency", which aims to demonstrate the creative capacity of young people, despite the normative, critical and pessimistic discourse on their situation. The concept of social agency itself is derived from the discussions around equity and freedom concepts ("development as freedom" from Amartya Sen). All current discourses on "self-employment" and "entrepreneurship" give the impression of taking root in the social agency concept (the capacity of individual agents to construct and reconstruct their world).

The youth possess tremendous transformative potential, with individuals able to make choices, but the risk of this approach is the disconnection of the youth from existing productive structures, with the youth not being on an "island" (Losch, 2016a). Youth is intimately linked to the processes by which societies regenerate the social structures allowing their continuity through time (Koenig, 2014) and individual choices are dependent on productive structures: the transition from childhood to adulthood results in a combination of individual choices, initial and changing social capital, and structural barriers (Worth, 2009). More precisely, this transition is a period of transition during which the economic, social and cultural dependencies evolve and where the entry in adulthood is characterised by the overcoming of three thresholds: departure from the family, entry in union and entry in professional life (Antoine *et al.*, 2001; Boyer & Guénard, 2014; Sumberg *et al.*, 2015). Using a such definition leads to the consideration of generational aspects. In fact, the youth "category" is a

“making system” with their elders, built with regard to other generations and especially with respect to access to resources that confer social capacity and political power (Chauveau, 2005).

Box 2: What is the vision of youth upheld by national youth policies?

An ambivalence on the role of youth stands out from national youth policies: The youth are seen as agents of change due to their “new energy”, and also as a problem due to their “vulnerability and risk of deviance”. In the end, the feeling is that youth policies are thus as much about disciplining undesirable behaviours and attitudes as they are about developing skills and advancing the wellbeing of the youth. In terms of the priorities highlighted in youth policies, health and education come first and sometimes employment. Links with agricultural and rural issues are not very frequent.

While most African countries have national agricultural and youth policies and programmes (see Table 4), the youth is not involved in policy processes (FANPRAN, 2012). Policies also tend to have a statist conceptualisation of the policy process, with a technocratic view of the evidence, limited roles for collective action, and a “participation-light” approach (Te Lintelo, 2012). Policies and responses are often not evidence based, relying too heavily on “common knowledge” and not responding to the needs of the youth (FANPRAN, 2012). As a result, policy responses are commonly at odds with young people’s imperatives, aspirations, strategies and activities.

Country	Last update	National Youth Council	Thematic priorities
Angola	2006*	Yes	Education, health, sport, leisure, youth participation
Botswana	2010	Yes	Employment, poverty, environment, leadership, vulnerability, education, health, sport, culture
DRC	2009	Yes	HIV/AIDS, employment, sport, rural development and gender
Lesotho	2005	Yes	Environment, poverty reduction, employment, education and training, health and welfare, arts and sports, human rights, social integration, culture and values and youth participation.
Madagascar	2004	Yes	Health, food, education, employment, migration and integration
Malawi	2013	Yes	Education, health and nutrition, participation and leadership
Mozambique	2013	Yes	Technical and vocational training, employment and entrepreneurship, sport, arts, culture, HIV / AIDS
Namibia	2006	Yes	Employment creation, financial support, access to agricultural land, citizenship, disability rights, peace, security, education, environment, and reproductive health
Swaziland	2009	Yes	HIV/AIDS, Education, training and skills, participation, partnership and leadership, poverty and unemployment, drug and substance abuse, sexual reproductive health
Tanzania	2007	Planned but not yet	HIV/AIDS, disability, equality, financial services, juvenile justice, the informal sector, ICTs
Zambia	2006	Yes	HIV/AIDS, participation, access to ICTs, education
Zimbabwe	2013	Yes	Idem African Youth Charter
South Africa	2008	Yes	Youth economic development

*National Youth Plan (no policy as yet)

Table 4 : Youth policies in SADC countries

Source: <http://www.youthpolicy.org/>

2.2 Today's youth: A wind of change?

2.2.1 The best-educated generation

As pointed out previously, the first burning issue is the huge number of newcomers to the labor markets in Southern Africa. The second issue is qualitative: The large cohorts of youth entering Africa's labour force are the best-educated and healthiest the continent has ever seen (Fox *et al.*, 2016). The post-structural adjustment generation benefited from improvements in education and health resulting from public and donor investments, especially due to the Millennium Development Goals (MDGs) during the 2000s (Resnick & Thurlow, 2015). According to AfDB *et al.* (2012), based on current trends, 59 % of 20-24 year olds will have had secondary education in 2030, compared to 42 % today. Sub-Saharan Africa has seen a rapid growth in the number of children who have completed primary school, rising from about 50 % in 1991 to 70 percent in 2011 (Pritchett, 2013). The average young Ghanaian or Zambian today has more schooling than the average French or Italian citizen had in 1960. Nevertheless, while using the most recent and relevant dataset in the long run (Lee & Lee, 2016) indicates the African catch-up in primary education (MDG effect), it is less obvious for secondary and tertiary education.

Using data from the same database (Barro & Lee, 2013), Figure 10 illustrates the improvement in schooling since the 1960s in SADC countries. For all groups (see clustering methodology below the graph), younger generations reach a higher level of education than their parents and grandparents. For example, for the first group (3-6 years of schooling), today's youth have been in school three times longer than their grandparents, while the graph does not show the immense improvements in since the 2000s due the MDGs.

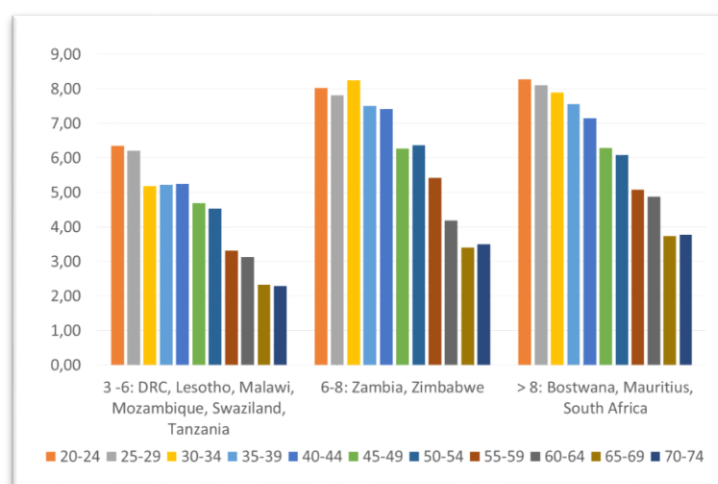


Figure 10 : Average years of schooling in SADC countries in 2010⁹

Source: Author's calculations from Barro & Lee database (2013) (Barro & Lee, 2013)

⁹ Methodology for building the graph: The bar graph shows the average years of schooling in SADC countries in 2010. The countries have been clustered in terms of the average years of schooling for the entire population of the country in 2010. Thus there are three groups: (i) the global average years of schooling is between three and six years, which is the case for the DRC, Malawi, Mozambique, Swaziland and Tanzania; (ii) the global average years of schooling is between six and eight years, which is the case for Zambia and Zimbabwe; (iii) the global average years of schooling is above eight years, which is the case for Botswana, Mauritius and South Africa. The duration of schooling of an age group in time t is the fraction of the group having attained the educational level of primary, secondary and higher (complete or incomplete) multiplied by the corresponding duration in years of each of these education levels.

Despite this pretty positive global picture, differences remain between rural and urban areas. In SSA, young people achieving secondary level stands at 65 % in rural areas and 77.5 % in urban areas (Elder et al. 2015). Moreover, social inequalities are still important and rooted in households: school outcomes (attendance and achievement) depend on both child characteristics (gender, relationship to the household head, and age) and household characteristics (economic wellbeing, household head's educational attainment, age composition of other children in the household, and place of residence) (Kuépié *et al.*, 2015). Gender gaps are also the rule, with access to school being typically lower for females, the rural youth, and those from poorer households.

Even if increasing numbers of children are attending school in Southern Africa, more schooling does not equal more learning (Pritchett, 2013). The focus has been put on quantity, but the lack of investment in quality calls into question the effect on productivity, even it is difficult to assess due to a lack of data on the real level of pupils. In fact, the poor quality of education directly constrains productivity and hinders individuals from acquiring new skills (Fox *et al.*, 2016). According to the (ILO, 2015), two thirds of young workers in SSA do not have the level of education expected to work productively on the job and those with higher education often do not have the skill sets required by employers (AfDB et al. 2012). Improving the quality of training is thus critical to any strategies for expanding youth employment opportunities. Even if basic education must continue to progress, Technical and Vocational Education and Training (TVET) is part of the solution, providing young people with more applied skills, matched to the productive system, especially bringing about innovations in farming technical models. However, this remains marginalised in the education system, representing 1-12% as a proportion of total educational expenditure, depending on the country (Oketch, 2015). Working on seven West African capitals, (Nordman & Pasquier-Doumer, 2012) demonstrated that vocational education often offers better earnings than general education. Also, according to the same study, young workers with no formal vocational education and training face poorer working conditions compared to those who benefited a traditional apprenticeship in a small enterprise.

2.2.2 Changes in aspirations?

The same future choices are not available to all young people, nor are young people necessarily aware of all their possible futures (Worth, 2009). It seems, however, that a rising phenomenon is the spurt in changes in youth aspirations in Sub-Saharan Africa. Aspirations (what someone hopes to happen in the future) tend to be formed in early childhood and are shaped and modified over time into expectations (what someone believes is likely to happen) and ultimately outcomes (what really happens). Both the environment close to the individual and the broader societal context therefore influence aspiration formation. In rural areas, relative isolation and close-knit communities with limited exposure to a broad range of experiences result in social pressures that encourage conformity, maintain “traditional” ways of living (including gender prescribed roles and responsibilities), and limit achievement regardless of aspirations and motivation to succeed (Leavy & Smith, 2010).

However, through their engagement in diverse labour markets (in local cities or abroad) and the connectivity offered by new media and technology, the rural youth are bringing closer to the outside world¹⁰ (Fox *et al.*, 2016; Leavy & Smith, 2010; Sumberg *et al.*, 2012). Moreover, a longer duration of schooling is related to changes in youth aspirations; with an increase in education level, an increase in

¹⁰ Admittedly, in 2016, Africa had the least internet penetrability in the world, with only 29% of its population having access to the internet, compared with a 45% global average (Ismail O. (2016) What Is in a Job? The Social Context of Youth Employment Issues in Africa. *Journal of African Economies* 25. pp. i37-i60. Nevertheless, the rate is without precedent. In that same year, African Facebook users were estimated to number 146 637 000, representing 12% of the entire African population (Internet World Statistics, 2015).

aspirations occurs (Sumberg *et al.*, 2015). As underlined by (Anyidoho *et al.*, 2012), differences in level of education are essential for aspiration formation due to the relation of educational attainment to perceived and real opportunities. Indeed, the disillusion about a fair job market increases with education; the youth with university education have higher expectations about a job than those who have never been to school (AfDB *et al.*, 2012). In a following section (3.1), the report elaborates on the link between aspirations and agriculture.

2.3 Youth as the driving force of structural change

Considering the evolution of young people’s aspirations and the fact that the youth are strongly connected to their family productive structures, it is assumed that the negotiation on rules shaping structural constraints is extremely critical. These negotiations result in structural change. As mentioned before, individual choices are made that are dependent on productive structures (see Figure 11). The unprecedented scale of population growth and the economic structures in Southern African countries plainly draw into question the terms of socio-economic integration of many young people looking for income-generating activities. The assumption is that new rules for the mobilisation of labour force are arising within productive structures and territories. The underlying issue is to grasp capital accumulation patterns that underlie the reproduction of the workforce.

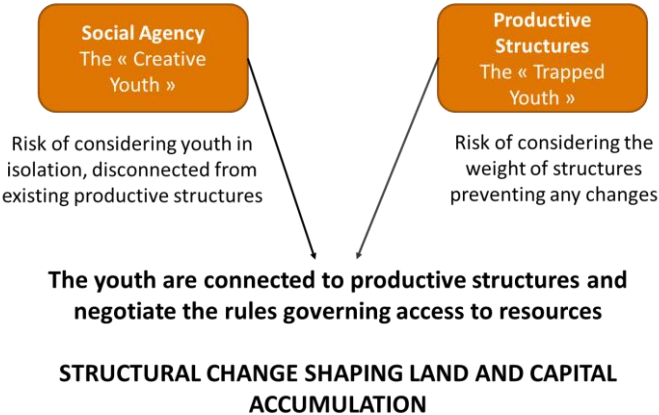


Figure 11 : An approach to grasping youth related issues: Between the “Creative Youth” and the “Trapped Youth”

Source: Author

Box 3 : Is entrepreneurship the silver bullet for the youth?

The vast majority of policies, programmes and projects put forward youth entrepreneurship as a silver bullet for resolving the employment issue in Southern Africa and more broadly in Sub-Saharan Africa but it is important to begin to trim the unrealistic expectations generated by the rhetoric of empowerment through entrepreneurship. As a matter of fact, success stories have increasingly been capitalised and popularised over the past decade, especially through the internet. A positive picture is set in the “Afro-optimism” narratives that have emerged since the growth recovery of the 2000s. The impact of entrepreneurship projects appears to be mixed. For certain scholars, these projects can be successful if they target people already engaged in informal businesses, with access to credit and adequate mentorship (Betcherman *et al.*, 2007; Rother, 2006). For other scholars, at present there is little evidence about how, in what situations, or for whom these programs deliver “non-vulnerable” employment (Allen *et al.*, 2016). Anyway, the number of these interventions is too small to draw firm conclusions. It is difficult to see how they “do the system” and it is unrealistic to conceive that all young men and women will become self-employed entrepreneurs. The assumption that poor people’s livelihoods should only be based on self-employment, such as own-account small-scale farming, is a fallacy, and entrepreneurship projects totally evade social differentiation between productive structures and wage relations underlying and representing the immersed part of mass workers. Supporting entrepreneurship should be paired with support to wage workers.

Section 3. Generating activities for youth in the agricultural sector

This section considers the potential of the agricultural sector in terms of generating activities for the youth in Southern Africa. After highlighting the paradox between youth and agriculture, an analysis of land availability and agricultural profitability encompasses the place of agriculture in Southern African countries. This is followed by a discussion of the capital access issue and agricultural technical models, what they mean for job creation and their main challenges. Lastly, the section expands on the potential of the agri-food system in terms of creating employment.

3.1 Youth and Agriculture: The paradox

Although small-scale agriculture is one of the major sources of employment in SADC countries, mounting evidence suggests that young people are not interested in farming or a future in rural areas. Recent and relatively abundant literature on the mismatch between youth aspirations and agriculture enumerates the reasons for this “falling out of love” (Sumberg *et al.*, 2012; White, 2012). With little access to modern techniques, young people describe farming as dirty and demeaning work. Moreover, because family work is placed under the authority of the head of the family who manages the distribution of incomes, young people often feel that they are not well rewarded for the work done (Chinsinga & Chasukwa, 2012). Thus, agricultural employment is often not seen as a viable career (Brooks *et al.*, 2013). Hence the notion that young people turn away from agriculture not simply as a result of poor economic prospects, but also because of status; agriculture is unappealing to the youth because it does not bring status regardless of the economic outcomes (Leavy & Smith, 2010). Nevertheless, according to (Leavy & Smith, 2010), young people in areas of high agricultural growth are likely to be more interested in making farming a central element of their livelihood than those living in low-growth areas. More broadly, the youth reject a rural lifestyle because of the lack of services and socio-cultural infrastructure (White, 2012). Nevertheless, some recent studies demonstrate that young people are expressing more interest in finding jobs in downstream and upstream services to agriculture (Hagglblade *et al.*, 2015); (White, 2012).

In any case, due to the lack of an alternative a large portion of the rural youth will not have any choice: agriculture will be part of their activities. Most rural young people will be involved in agricultural activities, more or less permanently, even if this does not correspond to their life plans (Chauveau, 2005). Beyond the difficulty of finding a wage or salaried job, work contributions are very often required by the family (Elder *et al.*, 2015). Ultimately, over the next 10 years, most young people will end up working where their parents do, namely on family farms and in household enterprises (Filmer & Fox, 2014). Young people's interest in making farming an essential element of their livelihood will likely be positively related to their ability to put together or gain access to the resources needed to farm on a "commercial" basis (i.e. land, credit, labour).

3.2 Is there room for agriculture in Southern Africa?

3.2.1 Is Southern Africa land abundant?

Following the 2007-2008 food crisis, an optimistic view emerged of land availability in Sub-Saharan Africa, but the assertion that the sub-continent is hugely land-abundant needs substantial qualification (Chamberlin *et al.*, 2014);(Roudart, 2009).

The potential availability of agricultural land depends on the biophysical endowments (soil characteristics, pests and diseases, rainfall, temperature and topography), as well as the possible adaptation of farming systems and the profitability of agricultural activities. Given these parameters, one of the best recent assessments demonstrates that in the short to medium term, the estimates oscillate between 80 million hectares (when forest land is excluded, with limited input use) and 385 million hectares (forest included, with high input use) (Chamberlin *et al.*, 2014; Losch, 2016a).

Focusing on SADC countries,

Table 5 shows the ratio between the estimated potential available cropland and the new rural active population in 2050 (forest excluded or not from the potential expansion). In agriculture-based and mining/oil-based countries, the potentially available land per new rural active person in 2050 varies greatly from one country to another due to high variability in populations and densities. In Zambia, the average potential available cropland in 2050 is around 4.5 hectares per rural active person whereas there is not enough land in Malawi where the trend is growing pressure on land resources, with declining farm sizes. In the end, it means that agricultural development will no longer rely on area expansion in many SADC countries. Due to land scarcity, there is a very limited room for agriculture unless there is a massive increase in production per hectare and per worker.

In some countries, like Botswana or Namibia, it is evident that the larger areas of arable land are not in the same location as the major populations but instead correspond instead to areas of low pressure on land, with areas dedicated to extensive livestock production.

	Rural active population (Thousands)			Estimated PAC (ha) in 2014 (Thousands)		Average PAC (ha) /new rural active persons in 2050	
	2015	2050	Increase	Excl. Forest	Incl.Forest	Excl. Forest	Incl.Forest
South Africa	12 607	10 120	-2 487	4 577	5 115	ns	ns
Swaziland	598	870	272	22 162	31 695	81,43	116,46
Botswana	620	691	71	1 329	1 554	18,81	22,00
Zambia	4 901	10 484	5 583	25 500	42 100	4,57	7,54
Namibia	784	918	133	387	503	2,90	3,77
Angola	7 005	13 939	6 934	18 700	32 600	2,70	4,70
Madagascar	8 721	15 438	6 717	16 300	18 300	2,43	2,72
Mozambique	9 738	20 237	10 499	21 400	33 300	2,04	3,17
Zimbabwe	5 849	10 840	4 991	5 736	7 032	1,15	1,41
Tanzania	18 870	38 184	19 314	16 100	22 900	0,83	1,19
Malawi	7 409	18 453	11 044	24	37	0,00	0,00
Lesotho	928	1 073	145	0	0	0,00	0,00
SADC Countries	357 363	645 612	288 249	336 308	587 726	1,17	2,04

Table 5 : Potential Agricultural Cropland (PAC) and Rural Population in SADC countries

Source: Chamberlin *et al.* (2014); WPP (2015)

Methodology: Author's calculations based on Losch (2016a)

3.2.2 Rising competition for land use

Even if potential agricultural cropland remains in some areas, the plural ways of using agricultural land, invisible in the statistics, induces competition among users. In particular, many low-density areas are already being used for pastoralist livestock production or a wildlife migration corridor, while many forested areas are inhabited by indigenous people who rely on the existing biosystem and would be adversely affected by changes to it (Chamberlin *et al.*, 2014). In areas where there is competition between agriculture and pastoralist livestock production, there is already evidence of an increase in conflicts between farmers and herders for grazing. In land-constrained areas, there is also competition for the use of the biomass during the dry season (farmers wanting to use it for manure and herders wanting to feed their cattle). Moreover, in Southern Africa, around 40 % of the land access is currently under forest cover (see Table 5); and the conversion of forests to cropland would entail major environmental costs (Chamberlin *et al.*, 2014).

Besides non-agricultural users, there is competition to access land among farmers themselves. Land access is a factor of differentiation between rural livelihoods. In selected countries in Eastern and Southern Africa (late 1990s), it was noted that while the top quartile of farm households had two or more hectares, the bottom 25% of small-scale farm households were virtually landless, having access to less than 0.5 hectares per farm household, or around 0.11 hectares per capita or less in each country examined (Chamberlin *et al.*, 2014). To some extent, this long-term differentiation process is called into question by two kinds of external investors in agriculture.

The first is large-scale investments over recent decades in Southern Africa (and more broadly across all developing countries in the world). According to the most recent Land Matrix update (2016), Africa remains by far the most targeted continent by international investors for large-scale acquisitions

(above 200 hectares). In the SADC region, the magnitude of land acquisitions differs according to the country (see Figure 12). Mozambique is by far the most targeted country: large-scale investments amount to around 1.3 million hectares, representing 22 % of the arable land and permanent crop areas. In Zambia and Zimbabwe, large-scale acquisitions are on the fringe, accounting respectively for 5 % and 8 % of the arable land and permanent crop areas. Furthermore, this type of investment occurs on the most suitable land for agriculture, especially with the availability of water for irrigation (Nolte *et al.*, 2016).

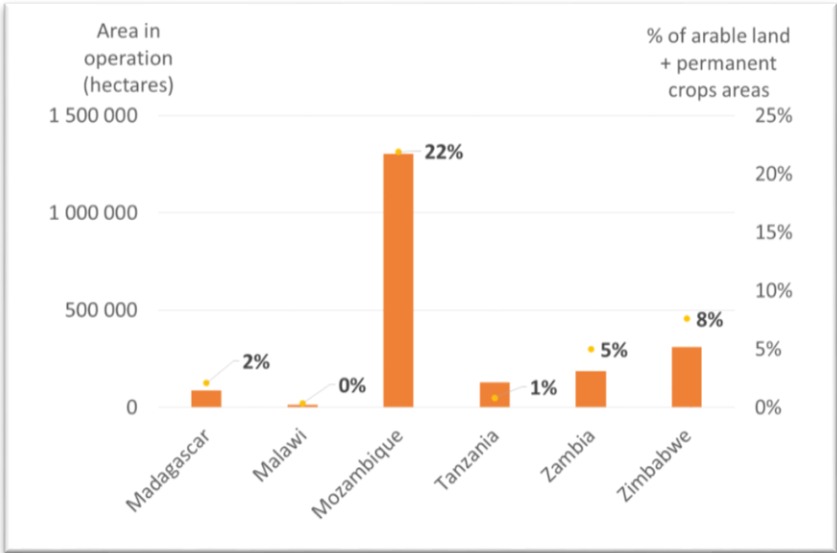


Figure 12 : Large-scale investments in some SADC countries

Sources: Author’s Calculations from Land Matrix Database, updated February 2016; FAO (2013)

The second (and not the least) emerging trend affecting land access for small-scale farmers is the trend of medium-scale local investors (between 20 and 100 hectares), which has been quite well documented by recent studies in some Sub-Saharan African countries (Anseeuw *et al.*, 2016; Jayne *et al.*, 2014; Sitko & Chamberlin, 2015; Sitko & Jayne, 2014). This is not the same type of land grab making headlines in the local and international press, although the effects in terms of future land access for the local smallholder population may be the same (Jayne *et al.*, 2014). As a matter of fact, medium-scale farmers currently control more land than large scale foreign investors in Ghana, Kenya and Zambia (Jayne *et al.*, 2014). There is little evidence to support the hypothesis that the rise of emergent farmers primarily represents a process of successful accumulation by farmers who began farming with less than five hectares of land – a situation faced by more than 95 % of farming households. On the contrary, the majority of medium-scale farmers are local investors – salaried urbanites or relatively privileged rural individuals (Sitko & Jayne, 2014). For instance, between 2001 and 2013, the population of emergent farmer households in Zambia grew by 62.2 %, vastly outstripping the 33.5 % growth rate of the total smallholder population (Sitko & Jayne, 2014).

Box 4 : Is Zambia really land abundant? A regional analysis for assessing land availability

Instead of a country approach, a regional (local) analysis for grasping land availability is more relevant. The case of Zambia is highly instructive. Based on aggregated statistical data, this is one of the Southern African countries with the largest land availability, and the dominant narratives often state that 94% of the land area is under customary tenure and available for agriculture.

Nevertheless, when combining different parameters like land mass, State land and farm blocks, national parks and game management areas, forest reserves and urban settlements, the potential land available to smallholders for cropping is more limited (Sitko & Chamberlin, 2016). As such, researchers have dismantled the common view, finding that only 54% of smallholders in Zambia indicated that traditional authorities (see Figure 13) no longer had land to allocate to local households. Moreover, when adding others parameters like suitability for maize production (the major Zambian staple crop) or distance to the main roads, the profitability of agriculture is clearly impacted.

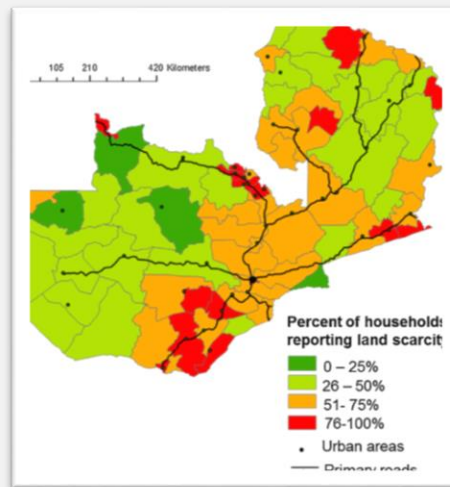


Figure 13 : Percentage of smallholders reporting that local customary authorities do not have land to allocate, by district in Zambia

Source: Sitko & Chamberlin (2016)

3.2.3 Limited profitability of agricultural activities

Beyond land availability and competition for land, the profitability of agricultural activities is questioned. In fact, even if land is available, agriculture will be appealing only if it is profitable, i.e. if farmers can make a living and earn a decent income (especially when compared to cities). Two major options exist for improving farmers' incomes and they are, of course, not exclusive (Losch, 2016a). The first is related to increasing the value of farm outputs through: (i) the diversification of agricultural production with more high-value products like fruits, vegetables and dairy, or "label" production (based on organic, fair trade or social certification); (ii) the improvement of marketing systems; and (iii) the transformation of products on-farm when possible (first processing through shelling and grinding). The second option is related to increasing land and labour productivity.

Looking at the latter, even if yields have increased slightly over the past decades, African agriculture (with the exception of South Africa) has the lowest productivity when compared to other regions of the world (Dorin *et al.*, 2013). According to Fuglie & Rada (2013), the annual yield growth rate has remained at around 1 % since the 1960s. As shown in Figure 14, labour productivity has remained stagnant in SADC countries since 1960s.

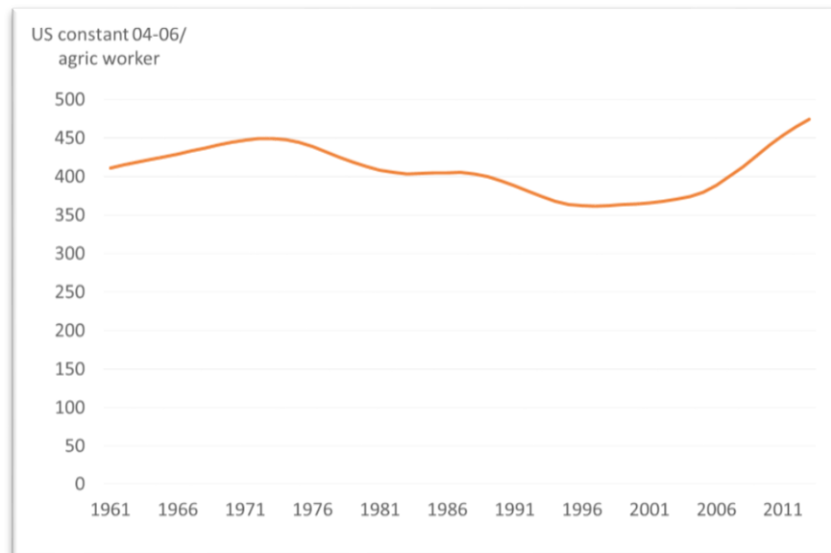


Figure 14 : Evolution of agricultural labour productivity in SADC countries, except South Africa and diversifier countries

Source: Author's Calculations from USDA, Fuglie Database (2016).

Land availability can explain partly the low increase in yields. Indeed, in a context where inputs and technologies were (and still are), difficult to access, rather than being intensified, farmers have increased the use of their greatest means of production, which is land (Dugué *et al.*, 2012; Petit, 2011). Furthermore, Southern Africa (with the exception of South Africa and localised areas in the region) was largely bypassed by the Green Revolution, which helped transform agriculture and reduce poverty in Asia and Latin America (Fuglie & Rada, 2013; Losch, 2016a). For instance, irrigated areas doubled between 1961 and 2013 (from 2.7 million hectares to 5.9 million hectares), but the percentage of irrigated land/agricultural land decreased during the same period (from 2.8 % to 2.6 %). The average quantity of fertiliser per area harvested increased only from 3 kg/ha during the 1960s to 8 kg/ha during 2000s. Per 1 000 hectares of area harvested, tractors increased from 0.69 in 1961-1970 to 0.87 in 2001-2008. Lastly, crop areas under improved varieties increased from 0.5% in 1961-1970 to 21% in 2001-2008, which is relatively significant.

This assessment of Southern African agriculture and the prevailing high rates of hunger in the region found many scholarships, public donors, NGOs and foundations setting the challenge to rapidly increase food production, supporting numerous food security programmes promoting the use of chemical inputs to fill the yield gap. Rather than having a “productivist” view on agriculture, i.e. looking at agriculture from the narrowed production point of view, the generation of employment depends on underlying technical models. The burning question is how to grasp the kind of technological change that could increase productivity while generating appealing employment, and also being environmental friendly (see 3.5).

3.3 Constraints on investment by young people in agriculture

3.3.1 Capital accumulation tightened by the lack of welfare system

Young people perceive a lack of capital as being a serious obstacle for farm development (Allen *et al.*, 2016; Chinsinga & Chasukwa, 2012). Within the family, capital availability depends on the sharing of

incomes for the benefit of inactive workers and extended family. Indeed, the prevalence of the informal economy and the absence of a public welfare system (concerning a very small share of the population) gives a central role to family and community in terms of providing healthcare and some kind of pension for elders (Kpessa, 2010; Kuépié, 2012). Therefore, for most people, social protection plans designed around the extended family and the community are the only institutional providers of social security (health and pension systems). The system is based on the principles of intergenerational reciprocity as a reciprocal welfare system (Kpessa, 2010) taking various forms and obeying different rules according to the society (Antoine, 2007). This system is sustainable only if the motives for transfer are guaranteed at all times and if the current working generation has enough reason to believe that there will be sufficient future workers to ensure income or security of care in old age (Kpessa, 2010).

Southern Africa is unique because the high prevalence of HIV calls into question the historic system in terms of relatives caring for patients for extended periods, and in terms of the increasing number of AIDS orphans (Antoine, 2007). A huge proportion of children and young people are forced to take over multiple responsibilities at home, including caring for sick parents, relatives or siblings. Hence, the HIV epidemic delays the transition from childhood to adulthood (Day, 2015).

An increase in public social transfers may happen in the future, but it seems that work will continue to be the main source of income, and generational solidarities will go on to bridge State failures. Nevertheless, the rules controlling intergenerational transfers could be called into question and could affect the reproduction of rural livelihoods. Firstly, depending on the evolution of consumption patterns, a working generation might end up consuming more than they transfer to a younger generation. Secondly, the new working generation might also be inclined to withhold resources from the aged for previous poor investment decisions.

3.3.2 Getting a fairer share of returns from contributions to family activities

The historic way of getting capital is through family inheritances and access to family incomes. Inheritance modalities depend on a diversity of rules according to the lineage, but the global aim is always to provide a basic capital to the next generation. In a region where people have been compelled to decapitalise (due to imposition of tax during colonization, following climatic disasters, livestock diseases), families have little capital to transfer to young people: the inheritance process is clearly called into question and young people will have to find an initial capital outside the family.

Regarding access to family incomes, the allocation thereof is based on hierarchical relationships and heavy dependence on decisions taken by elders (Antoine, 2007). Indeed, agrarian societies are typically sites of patriarchy in both gender and generational relations (White, 2012). Facing this situation and keeping in mind the evolution of the youth's aspirations (see 2.2.2), the latter may claim better social and financial recognition related to their contribution to family work. More widely, they may ask for more accountability and recognition of their rights. Thus, young people may seek to change the family rules governing income distribution so as to benefit from it more directly. Lastly, they could try to capture a portion of the family-accumulated capital for investment purposes.

3.3.3 Accessing capital outside the family farm

If young people are not easily able to access capital within the household, they may acquire it outside the family through self-employment, wage employment or credit systems.

As mentioned above (see 1.3.2), although informal wage employment is crucial for the survival of the poor, this option is quite limited in terms of boosting investment due to very low capital accumulation

(Cramer *et al.*, 2015). Indeed, on the one hand, small-scale farmers do not offer very high or regular wages to their workers. On the other hand, larger-scale farms tend to pay their employees more, but they employ them on short-term contracts due to the seasonality of agricultural activities, and also (especially in the case of migrants) due to the complexity of the labour laws and the inflexibility of the fines for firing workers. Lastly, the accumulation of wealth as a result of self-employment in non-farm activities is not happening on a large enough scale (Alobo Loison, 2015). Considering the meagre incomes earned through wages or self-employment, if young people are seeking to invest money in agriculture, it must involve a high-value crop with a quick return in order to keep this small capital in constant use. (Okali & Sumberg, 2012), for instance, demonstrated how young Ghanaians intensively invest their small capital entirely in tomato production, growing three crops per year.

Credit is often presented as a silver bullet when it comes to solving issue of capital for young people. Nevertheless, the history of credit systems in their overall diversity, as advocated in Sub-Saharan Africa, produced mixed outcomes.

State credit schemes set up during the 1960s and 1970s in newly independent Southern African countries, such as Malawi¹¹ and Zambia¹², produced mixed results among small-scale farmers (Ballard *et al.*, 2015; Douillet, 2011). On the one hand, the repayment rates were very low (the purpose of credit was apparently misunderstood and abused), contributing to the indebtedness of the State-based agencies. On the other hand, programmes were initially targeted at smallholder farmers, but in the end, the dual system of agricultural structures inherited from colonisation has led to European and progressive African farmers supported by strong agricultural policies and a large community of African smallholders abandoned to themselves (Ballard *et al.*, 2015). The liberalisation of African economies in line with the structural adjustment plans of the 1980s and 1990s has also taken place in the agricultural finance sector, which saw an emergence of microfinance initiatives. Following the successive economic and food crises in the 1990s and early 2000s, some Southern African countries revived strong input supply and marketing policies, especially for maize, the staple crop in the region. Zambia, like Malawi, set up a National Food Reserve Agency, which is supposed to purchase farmers' production, as well as subsidise input credit access schemes. These strong-willed policies have had an impact on the overall production, but have benefited only a limited number of farmers (Ballard *et al.*, 2015; Douillet, 2011; Sitko & Jayne, 2014).

On the microfinance side, the extensive development of microfinance institutions since the 1980s has not yet fulfilled the challenge. This is particularly the case for young people who still have little access to credit through formal institutions (see Figure 15): between 0% in Mali and Niger and 10% in Uganda (Demirguc-Kunt *et al.*, 2015). The reasons for this situation are numerous. Firstly, agriculture is a risky activity, and microfinance institutions are inadequate when it comes to financing it (Wampfler *et al.*, 2009). Risks happen at different levels: production (climate and pests), storage, marketing (price fluctuations), the risk of individual production, family (illness, death), and lack of insurance systems. Rural young people have been labelled as high-risk clients, because they have few assets that can be used as collateral to access credit or loans. Secondly – as a consequence of the above – although microfinance emerged from the attempt to finance productive activities for rural people excluded from traditional financial systems, microfinance institutions now follow a financial logic, focusing on the

¹¹ In Malawi, State set up the Agriculture Development and Marketing Corporation which held the input supply and marketing monopoly

¹² In Zambia, State established a succession of credit systems: The Credit Organization of Zambia in 1966, the National Agricultural Marketing Board in 1974, the Agricultural Credit Management Programme in 1994, etc. Ballard A.M.Z., Sitko N.J., Namonje-Kapembwa T. (2015) 51 Years of Zambian Agriculture, in: A. C. a. N. J. S. eds (Ed.), *Agriculture in Zambia. Past, Present, and Future*, *Indaba Agricultural Policy Research Insitute*. pp. 165.

most profitable rural areas (low-risk crops or regions) and investing in urban markets (Doligez *et al.*, 2016; Fouillet *et al.*, 2016; Wampfler *et al.*, 2009). Lastly, the recent development of outgrower schemes, where large private agro-processing companies or input suppliers provide credit (in kind: fertilisers and seeds) to farmers in exchange for their production (also called contract farming) is still difficult to assess in term of real earnings for the farmer.

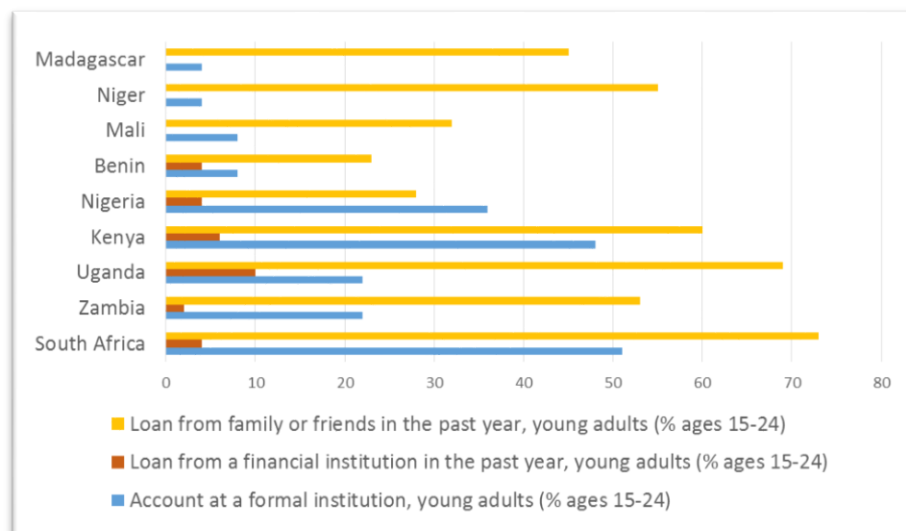


Figure 15 : Financial inclusion of the youth in certain Sub-Saharan countries

Source: Based on Demircuc-Kunt *et al.* (2015), *Global Financial Inclusion Database World Bank (2015)*

In light of the above, when the youth can access capital, it is mostly through initiatives led by semi-formal NGOs and community-based organisations (such as savings/self-help groups and village savings-and-loan associations), as well as informal private financial services providers (moneylenders and traders, family and friends) (Demircuc-Kunt *et al.*, 2015) (see Figure 15).

3.4 The complexification of land access modalities for young people

Where land is available and profitable, young people will farm if they can gain access to that land. This depends on the evolution of the current land tenure regimes.

In some Southern African countries (such as Zimbabwe and South Africa), the story of land – and labour movements – is closely linked to the development of mining and agrarian capitalism during the colonisation¹³: the expropriation of Africans from their land in order to install mines or for the settlement of European farmers, followed by the capture of land by a back elite following independence, and the land reforms of the 1990s, with mixed outcomes.

Today, there is an overlap of three main types of land tenure: State or public land ownership; land ownership through various forms of customary tenure; and private land ownership with land titles. Within the conventional systems, the traditional means of accessing land is inheritance within the family according to the rules of lineage. Inside the family, elders, parents, or uncles/aunts (depending on the type of social organisation – whether matriarchal or patriarchal) directly manage the transmission of production means to children, within the rules of land management enacted by local

¹³ See especially Arrighi G., Aschoff N., Scully B. (2010) *Accumulation by Dispossession and Its Limits: The Southern Africa Paradigm Revisited Springer*, Heidelberg, Allemagne. pp. 29. And Cochet H., Anseeuw W., Freguin-Gresh S. (2015) *South Africa's Agrarian Question HSRC Press*, Cape Town. pp. 358.

customary land institutions. Mostly, intergenerational relationships are based on reciprocity to ensure the social reproduction of rural livelihoods. Elders often keep control of the land for a long period of time: young people in Madagascar, Malawi, South Africa, Zambia and Zimbabwe who were asked about agriculture suggested that their parents' unwillingness to relinquish control of the land was one of the most significant constraints (Allen *et al.*, 2016). In such customary land systems, land is never sold and is inalienable. This global framework must not hide the socio-economic differentiation within the lineage resulting in tiered access to land for young people depending on their social origins. Unlike certain West African societies, Southern Africa is not characterized by caste systems featuring hierarchical status or inherited occupation social castes.

It seems likely, however, that in many places, access to land is no longer primarily through customary rights. Privatisation of land has advanced to the point where sharecropping or tenancy has become the most likely means of access to agricultural income (Lavigne-Delville *et al.*, 2002; Woodhouse, 2003). This commodification of land rights through institutional arrangements, such as access in exchange for cash, labour or credit, is firstly due to land scarcity, resulting from demographic pressure (due to the natural growth of the population and migration), and the growing usage of land resources (e.g. for livestock). Aside from land scarcity, when land benefits from specific investments such as irrigation infrastructures, stone barriers or terracing, its value rises and it is possible to identify processes of commodification and individualisation of access to land – “enclosure” – which reduce access to land for the poor (Woodhouse, 2003).

When competition for land intensifies, the inclusive flexibility offered by customary rights can quickly become uncharted terrain where the least powerful are vulnerable to exclusion as a result of the manipulation of ambiguity by the more powerful. Contrary to the shared belief, processes of commodification and socio-economic differentiation are firstly internal to local communities rather than imposed from the outside (Woodhouse, 2003).

This trend can be compounded by the recent wave of medium and large-scale land acquisitions facilitated by the provisions of national land laws (formal transactions and land rights granted through title-holding). These investments, while relying on the State laws, are often mediated by local hierarchies that are integral to rural communities, and often contribute to a (rural or urban) elite capture. For example, in Zambia, much of the growth of the emergent farming sector can be explained by a legislative and public spending framework that favours the alienation of large tracts of agricultural land by non-smallholder farmers, coupled with the disproportionate capture of agricultural public spending by a rural minority (Sitko & Jayne, 2014).

To summarise, from family inheritance processes, access to land results increasingly from local processes of daily accumulation, land concentration and social divisions that are inherent to land commodification. Considering this global framework that needs to be contextualised, today's rural young men and women, even if interested in farming, are confronted by the narrowing and sometimes complete closure of access to land (White, 2012).

3.5 What agricultural technical models for generating employment?

The levels in labour intensity are extremely diverse depending on the agricultural technical model. There are numerous debates on models that would generate employment. Commonly, two visions of agricultural progress exist.

On the one hand, the common thinking about agricultural development in Africa is about the adoption of the Green Revolution package and “classical modernisation” – an intensification pathway based on

modern inputs (improved seeds and inorganic fertilisers). This development option was supported by international agencies and research and adopted by governments. It is the backbone of the African Union's CAADP (Comprehensive Africa Agriculture Development Programme), launched in 2003 (Maputo Declaration) and confirmed in 2014 (Malabo Declaration). Although these conventional techniques introduced in the past allow a huge increase in volume and trigger productivity leaps, their low environmental sustainability has been demonstrated. In fact, the model relies on non-renewable fossil fuels, and returns on the costly use of fertilisers are hampered and reduced by soil degradation in many regions of the continent. Soil degradation is partly a consequence of continuous cultivation and lack of crop rotation where high population densities exist, resulting in soil acidification and deficiencies in soil organic carbon and micronutrients (Affholder *et al.*, 2013). Last but not least, this technical model based on conventional techniques is quite labour-extensive, especially when highly mechanised.

This negative assessment has been drawing consensus since the mid-2000s. For instance, the IAASTD's report drew on the expertise of about 400 specialists from all over the world, concluding that industrial, large-scale monoculture agriculture is unsustainable and must be reconsidered in favour of agro-ecosystems that combine mixed crop production with the conservation of water supplies, and the preservation of biodiversity, and the improvement of the livelihoods of the poor in small-scale mixed farming (IAASTD, 2008).

On the other hand, the agro-ecological farming model promotes the use of natural techniques and processes by fostering biological interactions and synergies for agricultural production like agro-forestry, soil conservation, integrated pest management and crop rotations. Most of these techniques are based on farmers' knowledge (Griffon, 2013). It is widely accepted that agro-ecological techniques are inexpensive in terms of external inputs, but intensive in terms of time, labour, and knowledge, and they have an impact on agricultural production only in the medium term (Dugué *et al.*, 2012). However, although it has been demonstrated that food outputs by sustainable intensification have been multiplicative in Sub-Saharan Africa (a study covering 12.7 million hectares found that crop yields increased 2.13-fold on average) (Pretty *et al.*, 2011), there are few references to their economic impact, especially in terms of employment generation, except on specific value chains like organic farming (see for example (Crowder & Reganold, 2015) who conducted a meta-analysis of a global dataset spanning 55 crops grown on five continents). In the case of organic farming, an increase in income is mainly due to premiums on purchase prices. More broadly, the establishment of data on agro-ecological farming outcomes is more problematic than in the case of conventional farming, as this form of agriculture is highly context dependent.

Beyond this schematic view of the debate, the division between conventional and agro-ecological models is not so clear-cut. Before engaging farmers in agro-ecological path, considering farmers' strategies and examining what they are doing today is crucial to consider the transition from conventional to more agro-ecological agriculture. The issue lies in knowing what will provoke a change in farmers' practices.

For (Boserup, 1965), an increase in population, provoking a fall in the hourly productivity of labour, constraints people from changing their production techniques (what should be named "creative pressure"): population growth becomes a true engine of agricultural progress. However, Boserup's theory is not sufficient to understanding changes because it does not take into account the history of agrarian systems. Only a systemic approach, taking into account all socio-economic specificities, can explain changes in production techniques (Cochet, 2004). Not only land constraints account for the

evolution of labour intensity, but so does the history of the production system within the agrarian system related to national and international contexts.

Therefore, to analyse technical change, the decomposition of annual labour productivity is the more relevant approach (Levard & Dumazert, 2015). In the specific case of labour substitution by capital (mechanisation, motorisation), the effect on employment is variable. If the changes resulting in labour substitution by capital often have an adverse impact on employment, there is no absolute rule, and each concrete situation should be carefully examined (Levard & Dumazert, 2015). Mechanisation generates employment if it unlocks a bottleneck (due to a lack of workers or busy working periods) in operation chains. Nevertheless, in the case of highly mechanised large-scale farms, labour intensity tends to be very low – in a significant number of cases, less than 50 workers per 1 000 hectares (Nolte *et al.*, 2016).

Box 5 : A limited role for large-scale farms in employment generation

The argument in favour of large-scale farming is that these farms can provide remunerative employment to people unprofitably engaged in semi-subsistence agriculture, and that they are in a better position than small-scale farms to adopt and adapt technologies to local contexts, thereby allowing them to maintain yield growth over time (Sitko & Jayne, 2014). These farms provide economies of scale under some conditions and enable the provision of stable employment (Vargas-Lundius & Suttie, 2014). According to the latter authors, large-scale farms may play a role in competing for labour with smaller farms, placing upward pressure on wages.

However, even if data is scarce, several case studies demonstrate that the increase in employment is far from obvious. The Land Matrix Database (Nolte *et al.*, 2016), estimates the loss as ranging between 28 % (Tanzania) and 75 % (Kenya) compared with smallholder farming. Although these losses have a major effect on the immediate proximity of the investment site, at the national level they reflect on average less than 1 % of overall employment in agriculture.

Several insights explain the low generation of employment within large-scale farms. Firstly, the setting up of commercial farms on former smallholder land will affect the livelihoods of the smallholders. This is a serious concern, as smallholder farmers formerly cultivated over one-third of the land acquired. Secondly, capital-intensive crops are three times more commonly cultivated by commercial farms compared to their labour-intensive counterparts. Thus, labour intensities tend to be very low – in a large number of cases, less than 50 workers per 1 000 hectares. Thirdly, the production model applied might mitigate eviction, for instance by using contract farming schemes. However, contract farming schemes are only applied on about two out of every 10 hectares of land affected. In the end, the creation of employment only occurs in the start-up phase and thus for only a brief period, i.e., while preparing the land and setting up the farm.

3.6 The agri-food system: Has potential but is not key

In SADC countries as in other Sub-Saharan African countries, food expenditures still represent the majority of households' spending. According to recent publications based on national consumption surveys in several regions in Africa (Bricas *et al.*, 2013; Tschirley *et al.*, 2015), the ratio of food to total expenditures varies between 40 % and 60 % according to the country (in Europe, it varies between 5 % and 25%). Even in rural areas, if auto-consumption has traditionally not been marginal and is part of a risk management strategy (Losch *et al.*, 2012), spending on food accounts for 50 % of household

budgets. In cities, recent studies have demonstrated an increase in demand for rice, wheat and more original processed products, and a slight decrease in the demand for fresh products (Bricas *et al.*, 2013; Kaneene *et al.*, 2015; Tschirley *et al.*, 2015). According to Tschirley *et al.* (2015), processed food (low and high value added together) holds a 39 % share of all food expenditure (including consumed own production) and a 68 % proportion of purchased food expenditure. For Kaneene *et al.* (2015), the change in consumption patterns is linked to increasing urbanisation, growing incomes and emerging middle classes, with particularly rapid advances in North Africa and some parts of Southern Africa.

Considering this recent evolution of consumption patterns in cities, the challenge is to know how that rising change will impact on food processing activities in Southern Africa, and the underlying generation of activities and training systems (Mercandalli, 2016). Indeed, the development of food processing implies preservation, packaging, storage, distribution and logistics. Given the projected value adding of the food market on the continent (see Figure 16), a consensus has emerged on the role of the private sector, also abridged as “agribusiness”, in terms of seizing opportunities in the agro-processing value chains, thus boosting the overall agricultural economic growth (Koira, 2014; Yumkella *et al.*, 2011). Additionally, it is true that employment policies often rely solely on the development of farming or the belief that farming development can keep young people “down on the farm” (Elder *et al.*, 2015). Moreover, recent studies have demonstrated that young people express more interest in finding jobs in downstream and upstream services to agriculture rather than on-farm jobs (Haggblade *et al.*, 2015; White, 2012).

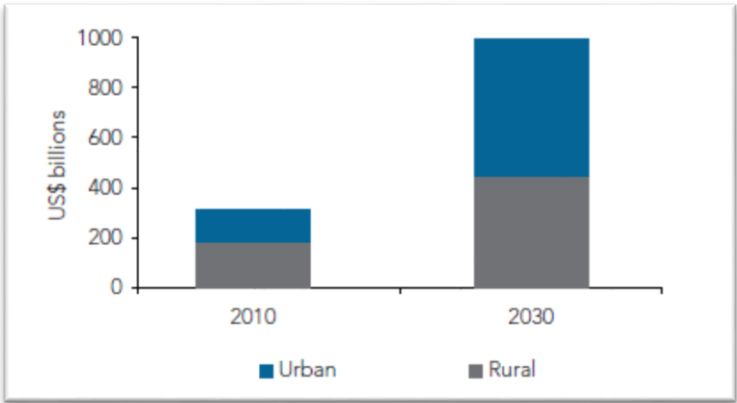


Figure 16 : Projected value of food markets in Sub-Saharan Africa

Source: (World, 2012)

Nevertheless, although the agri-food sector is growing very rapidly in percentage terms and will offer outstanding opportunities for new businesses, it will not match farming at the absolute level of new job creation for at least 10 years because it is starting from a very low base (Allen *et al.*, 2016). For example, compiling several databases on labour and activity, Allen *et al.* (2016) found that, when computed as full-time equivalents (FTEs), farming (of own farms plus hired farm labour) accounts for 43 % to 48 % of the labour force in Tanzania, 53 % in Rwanda, and 34 % in Nigeria. On the other hand, the proportion of the labour force in the off-farm segments of the agrifood system is about 8 % in Rwanda, 17 % in Tanzania, and 23 % in Nigeria in FTE terms. Thus, labour is moving sharply out of farming as the economies transform, yet farming remains paramount to people’s livelihoods and economic growth in the majority of Sub-Saharan African countries.

Section 4. Building blocks for strengthening youth employment in the agricultural sector

The objective of this section is to contribute to the SDC's 2018-2022 strategy by suggesting concrete entry points and possible plans of action to strengthen the integration of rural youth in the agricultural sector. Some of these are concrete measures that could be part of future SDC programmes, while others are more policy based and intend to provide key elements for the strategic discussions on youth employment issues that the SDC may have with Southern African governments.

4.1 Advocating for territorial public policies to meet the youth employment challenge

The rapid changes in the way in which people live, as a consequence of gradual improvements in infrastructure (road networks, improved transportation, new information systems, the mobile phone revolution) have profoundly modified the countryside (Losch *et al.*, 2016a). As mentioned above (see 1.3), the diversification of rural economies often leads to interdependencies between rural and urban areas, in particular with the densification of circular migrations. Rural non-farm activities may have positive linkages with agricultural growth through consumption, but also through forward and backward linkages (in terms of capital, knowledge, etc.). Resulting from this process, new territories are emerging, cutting across administrative boundaries, and the lines between rural and urban livelihoods have become increasingly blurred (Tacoli, 1998).

Africa's structure as inherited from its colonial history was deeply influential in shaping the spatial organisation of every African country, with urban structural imbalances in favour of capitals, with small and medium towns unable to act as real driving forces due to a lack of infrastructure and services. This resulted in a rise in migration directly from rural areas to metropolitan areas, with migrants completely bypassing the smaller towns in many cases (Losch, 2016a; Mercandalli & Anseeuw, 2014). Hence, there is still a "missing middle" (Christiaensen & Todo, 2014). Connecting small towns and regional cities to their surrounding rural areas can help to soften the stark contrast between urban and rural areas, which would be a strong basis for a more sustainable rural non-farm economy and for the development and progressive upgrading of the informal sector, in which a large part of the African workforce is engaged.

Considering this context, taking into account the sectoral and geographic distribution of resources and people is crucial for potential development at the local level. This is why engaging in a territorial approach appears to be a necessary step in avoiding the "rural island" syndrome and breaking the rural-urban divide (Losch *et al.*, 2016a). Indeed, the juxtaposition of sectorial approaches misses many possible synergies at the regional level. Reinvesting in a territorial approach is a way to facilitate the adaptation of public policies to the diversity of local situations (Barral *et al.*, 2014) and to identify functional territories, which are spatial units with boundaries (often different from administrative limits) that are defined by existing social and economic relations, resulting in specific institutions and cohesion (AfDB *et al.*, 2015; Losch *et al.*, 2016b). In terms of understanding activity generation and thus employment opportunities, it is better carefully consider the location of resources and production and where value is being added (Potts, 2013). The stocktaking of specific territorial resources (e.g. natural, socio-economic and cultural landscapes) can surely help to identify new activities and new employment opportunities for the youth.

With such an approach, dialogue and participation have a critical role to play in this process, giving a specific role to the plurality of local stakeholders, with the support of local and central governments, as well as donors, in designing regional strategies based on accurate diagnoses (Losch *et al.*, 2016a).

Although many local case studies exist in Southern Africa, there is a serious lack of information at the regional level, which is related to the long-standing deterioration of the knowledge base and statistical systems within the region. Consequently, there are few regional approaches, clearly limiting policymakers' ability to anticipate the region's future requirements. One way to improve this knowledge is to implement regional diagnostic and foresight exercises at regional level to identify the nature of the challenges in terms of employment, infrastructure, services, natural resource management and spatial planning (see the CIRAD regional diagnosis and foresight in Mali and Madagascar: (Sourisseau *et al.*, 2016)).

A territorial approach seeks to identify opportunities for activities, but it is also necessary to take into account working conditions and to contribute to the improvement of labour policies in Southern Africa. As mentioned above, many young people, especially the poorest, have no other alternatives than wage employment. A comprehensive territorial policy must therefore aim not only at raising the level of self-employment in the informal sector, but also creating a specific focus on wage-earners, whose numbers are often underestimated. For this specific category (often casual and seasonal agricultural workers), supporting freedom of association, collective bargaining and increased unionisation is a way to improve overall working conditions. For example, in Ethiopia's flower sector, the active trade union struggles has led to tangible improvements for workers (Mueller, 2017).

4.2 Making agriculture more attractive

As pointed out above, the agricultural sector, and especially on-farm operations, has a poor image among young people. The commitment of future generations to farming activities will, therefore, depend on changing the perceptions of the youth. Outside the family, different social areas could trigger changes.

Firstly, schools should create a more positive image of agriculture. Various studies have noted how general education, as currently practised (particularly secondary education), contributes to a process of deskilling the rural youth, where farming skills are neglected and farming itself is downgraded as an occupation (White, 2012). Beyond the revision of school curricula at the national level, practical activities such as the establishment of school gardens, as already taking place in several countries, can boost children's interest in farming activities. More than a learning area, school gardens can also be a source of food for improving health and nutrition habits.

Furthermore, global mass media, in all its diversity (newspapers, television, web channels) has a role to play not only for young people but also society as a whole. Since the 2007-2008 food crisis in several African countries, media speeches have already begun to evolve, and many private media initiatives are attempting to revive the image of agriculture by shedding light on success stories related to young people engaging in the agricultural sector. As mentioned above, this myriad of accomplishments is far from a "doing system" and it is misleading to think that all young Africans will become entrepreneurs (cf. Box 3). However, it cannot be denied that these initiatives, when capitalised and mediated, contribute to improving the farming occupation in the best way.

Lastly, even if politicians are increasingly considering more and more youth in their political discourse, the link to agricultural potential is not always established. Donors certainly have a role to play in raising awareness among policymakers of the need to create a positive image of agriculture in order to increase the engagement of young people in this sector.

Box 6: Concrete approaches towards making agriculture more attractive to young people

- Including agriculture in primary and secondary school curricula and promoting practical activities through school gardens: “Rebranding agriculture in schools” in Uganda: www.projectdiscnews.blogspot.com
- Setting up and running school gardens: <http://www.fao.org/docrep/009/a0218e/A0218E01.htm>
- School garden programmes and food security in South Africa: <http://pulitzercenter.org/education/school-garden-programs-and-food-security>
- Slow food movement: List of school gardens in Africa: http://www.fondazione Slow Food.com/en/slow-food-gardens-africa/?fwp_orti_in_africa_tipologie=school-garden
- Web TV capitalising on success stories in agriculture: “Agribusiness TV”: <http://www.agribusinesstv.info/>
- Young Professionals for Agricultural Development: An international network of young people changing the image of agriculture: <http://www.ypard.net/>

4.3 Facilitating family inheritance processes for young people

Family farming can and should be a central part of the solution to the employment problems faced by the present generation of African rural populations (Sourisseau, 2015), but the real development challenge is mainly in relation to future generations. Whether it is access to land or capital, the issue of intergenerational transmission of the means of production is crucial for future generations of farmers, requiring work at different levels.

The first set of family support at the community and family level consists of setting up local and family consultation mechanisms to hasten access to land and capital for young people, granting them a type of “anticipated autonomy” aimed at keeping them on-farm. As land issues require changes in the relationships between the youth and elders within the community, it is essential to involve every community member in the discussion process and to soften hierarchies’ relations between generations. Therefore, negotiation mechanisms must include a mediator such as a group, farmers’ organisation or private company to facilitate communication between the youth and the older generation. There is a vast research and action field to explore in terms of identifying better schemes for facilitating the transfer of production means between old and young people. Once tested and approved at the local level, those systems could be part of national laws (as is the case in most developed countries where the farm legal status facilitates “father-to-son” transmission). Experiences in this direction are very rare on the African continent. A first step would be to recognise legal status for family farms, but few African countries have as yet included this measure in their agricultural policies (Mali¹⁴ has done so, even if this policy is not yet effective).

A second set of support aims at advocating for the implementation of public social protection policies for the most vulnerable people. On the one hand, this would reduce the pressure on capital accumulation within families due to health expenditure, and inactive people would not be fully in charge of the household. On the other hand, a pension system would limit the elders in keeping control on the means of production. Social protection policies are fragile in Sub-Saharan Africa but two main types stand out.

The first types of policies are those directly geared towards improving food security, the most famous example being that of Ethiopia (Devereux & Guenther, 2007). In this particular case, social protection

¹⁴ https://nyeleni.org/IMG/pdf/loa_Mali.pdf

programmes include conditional and unconditional cash transfers, food rations, public works programmes, school feeding, and targeted programmes for the elderly and disabled. Although the primary objective of these programmes is often to improve the food security of the poorest, it seems that the effects on the dynamics of capital accumulation, improvement of education, and employment are relatively positive (Tirivayi *et al.*, 2013).

The second type of policies are more comprehensive social protection systems and have mainly been set up in “diversifier” countries (such as Botswana and Namibia) or “diversified” countries (such as South Africa) (see 1.3.2). National experience from these countries has demonstrated that it would in principle be possible and affordable to provide all of the poor in Africa with a minimum package of social benefits and services, including access to basic healthcare, basic income transfers in case of need, and basic education. These benefit systems would have to be introduced gradually, in step with the growth of the economy and the expanded fiscal space. However, evidence from countries such as Botswana, Lesotho, Mauritius, Namibia and South Africa shows that social pensions have a remarkable impact on the living standards of elderly persons and their families, and particularly on children (ILO, 2016).

Box 7: Concrete approaches for facilitating family inheritance processes

- Working on the rehabilitation and subsequent distribution of land to young people facilitating negotiation on land with traditional land authorities in communities. “Land ownership for shea butter producers” in Burkina Faso: http://www.equatorinitiative.org/images/stories/winners/35/casestudy/case_1348150659.pdf
- Social protection and food security in Ethiopia: http://www.fao.org/fileadmin/templates/tc/spfs/pdf/FAO_2008_-_Social_Protection_Study_Case_Ethiopia.pdf
- Social protection assessment in Namibia: <http://www.social-protection.org/gimi/gess/RessourcePDF.action;jsessionid=QTmzYxrdgFLg1XLC14Nkdv9JsCb3dYwnGW6Yhy6z1hYR2yZxZBQC!-1211598784?ressource.ressourceId=47837>

4.4 Involving youth in local resource governance systems

Beyond an acceleration of intergenerational transmission, access to land (and water if necessary) also means working on rural land and water governance systems – from which young people (and women) are often excluded. As mentioned above, power and domination relations often underlie the governance of resources at the local level, thus leading to the capture of resources by local elites. To counterbalance their power, on which local disadvantaged people are dependent, a certain degree of “re-centralisation” may be needed to ensure that the needs of the excluded people (youth and women) are not neglected (Woodhouse, 2003).

Indeed, to go beyond the classical models of decentralisation in which the relations of power and domination tend to be reconstituted, the central State should ensure equity. For instance, the Land Rights Board in Botswana gathers together customary authorities, representatives of resource users' groups and government officials, with their task being to register, monitor and resolve conflicts in land use. As such, there must be an accurate identification of people representing each of those groups.

Box 8: Concrete approaches for involving the youth in local resource governance systems

- Leasing to provide youth with access to land, based on partnerships between companies, landowners and youth: The “Short-term land leases for youth” in Uganda: <http://www.fao.org/3/a-i3947e.pdf>
- Land Rights Board in Botswana: http://www.ngwatolandboard.gov.bw/SUB_LANDBOARDS.htm

4.5 Improving investment by young people in agricultural activities

Two main levers can increase the investment by young people in agricultural activities: the development of financial products adapted to the specificities of youth and “investment coaching” in agricultural activities for young people who have acquired off-farm incomes (through labour migration especially).

Although microcredit is not the silver bullet, the development of suitable financial products for young people remains an important pillar for improving youth investment in agriculture. In addition to the well-known constraints related to credit supply (lack of knowledge of agricultural specificities by the banks, high transaction costs for financial institutions due to farm dispersion and poor rural infrastructure, etc.), it is more risky for a financial institution to give credit to a young person than to an older person because of the lack of stability of young people and their greater difficulty in presenting financial guarantees for credit. A large body of research on financial innovation has to be undertaken in this area.

As mentioned earlier, young people are more prone to migrate than their elders and thus acquire off-farm incomes. One of the challenges is to take advantage of these off-farm earnings for agricultural activities. Some organisations have set up mechanisms to assist migrants and advise them on the investment of their capital in their departure areas.

Box 9 : Concrete approaches for improving investment by young people in agricultural activities

- Grouping in informal saving clubs can help rural youth to improve their means of generating savings and increasing their borrowing power
- Working with microfinance institutions on youth-dedicated financial products and lowering the risk of lending through special funds and group guarantees:
 - Youth Venture Capital Fund in Uganda: http://www.finance.go.ug/index.php?option=com_content&view=article&id=112:the-youth-venture-capital-fund&catid=8:in-the-press
 - Revolutionising Agricultural Finance: https://publications.cta.int/media/publications/downloads/1836_PDF.pdf
 - National Microcredit Fund for Women and Youth in Guinea : Subsidised loans from microfinance institutions, targeting women and youth: http://www.inter-reseaux.org/IMG/pdf/gds71_credit_rural_de_guinee.pdf
- Supporting migrants in their investment strategies in their region of origin
 - See GRDR projects in Senegal, Mali and Mauritania: <http://grdr.org>

4.6 Tailoring the youth education and training systems to the needs of the agricultural sector

As already mentioned, the African youth of today are the best educated the continent has ever seen. This is especially due to the MDG projects' commitment to universal access to basic education (Oketch, 2015), but the focus on general education is not sufficient. Although Technical and Vocational Education and Training (TVET) has advantages, it should receive greater support from governments and donors. TVET remains marginalised in the education system, representing 1 % to 12% proportion of total educational expenditure, depending on the country (Oketch, 2015).

Moreover, TVET does not focus enough on farming skills. For instance, research undertaken in Tanzania in 2011 showed that of 23 vocational training centres in rural areas directly managed and financed by the Vocational Education and Training Authority, only three were offering training connected with the agricultural sector. In most African countries, the situation is even more extreme, as in Malawi, where no agricultural training is provided in vocational centres (Oketch, 2015).

A myriad of donor-supported and NGO-based projects have been implemented across the continent, and these could be a source of inspiration for designing innovative training systems for the youth.

Box 10 : Concrete approaches for tailoring youth education and training systems to the needs of the agricultural sector

- Upgrading training facilities in rural areas: Improving the quality of training centres, enhancing the quality of instruction (teaching engineering and methods, etc.), matching processes at a territorial level between the needs of the productive system and the contents of the training, and co-ordinating actors at the local level
 - AFOP programme in Cameroon: http://www.inter-reseaux.org/IMG/pdf/gds71_afop.pdf
- Focusing not only on agriculture in the strictest sense, but including the development of human skills (e.g. cultural, social, technical, organisational and economic) and the linking of farming to industry and services. This implies the inclusion of the family in the youth training process.
 - Songhai Centre in Benin: <http://www.songhai.org/index.php/fr/>
 - Maison Familiales Rurales in several countries in sub-Saharan Africa: <http://www.mfr.asso.fr/mfr-dans-le-monde/pages/actions-cooperation-des-mfr.aspx#titre2>
 - Junior farmer fields and life schools: <http://www.fao.org/yunga/activities/capacity-development/junior-farmer-field-and-life-schools/en/>
- Having comprehensive multi-service interventions combining training and trainees/apprenticeships with facilitation access to capital
 - Ecoles familiales agricoles et collèges agricoles in Madagascar : <http://www.fert.fr/summary-of-the-impact-assessment-of-agricultural-colleges-in-madagascar/>
- Upscaling and improving higher education training in agriculture
 - Regional Universities Forum for Capacity Building in Agriculture (RUFORUM): <https://blog.ruforum.org/>

4.7 Supporting young people to engage in agro-ecological production systems

As mentioned in section 3.5, agro-ecological systems are rather attractive to the development community (donors, NGOs, etc.), as they are potential generators of activities (due to their labour-intensive and environmentally friendly nature). Nevertheless, as underlined by Dugué *et al.* (2012), the productivist model will ever have a favourable interest among farmers due to the lock-in effect in terms of farmers' practices, in agricultural areas with easy access to inputs (fertilisers, pesticides). Young people are extremely mindful of the returns on the physical effort and time spent, and most insist on the need for new technologies and inputs (such as fertilisers and most often mechanisation) when it comes to engaging in agriculture (Anyidoho *et al.*, 2012).

The youth's aspirations are certainly impacting on future agricultural models, and the opportunity to convince them to take part in agro-ecological systems should be seized. Since agro-ecology requires a good knowledge of the ecological context, the first thing to do is to make a diagnosis of their agricultural practices and strategies. However, once done, young farmers will engage in agro-ecological farming only if they know that profitability at mid-term is possible, that the cost of initial investment is affordable, that the risks are not too high, and that the labour requirements and arduousness are not too extreme (Dugué *et al.*, 2012). Therefore, without any financial support – in terms of prices or investment – the widespread adaptation of agro-ecological techniques is far from obvious. Hence, three complementary leverages can improve the involvement of young farmers in agro-ecology.

The first is technical: Producing knowledge to restore old practices or to invent new ones, inspired by local knowledge and research improvements. Such an objective can only be achieved with research by involving young people in bottom-up approaches to co-construct the knowledge. In this way, new practices are more likely to meet their needs and desires and will hopefully be more attractive. Even if the dominant approach in extension services is still based on knowledge transfer, many bottom-up initiatives have been implemented over the past decades (AFSA, 2016; Levard *et al.*, 2014; Toillier & Girard, 2016).

The second is financial: Even if the technical side works, financial support is needed to cover the risk of the transition. Thus, financial incentives can be implemented by facilitating investment in specific equipment and by increasing the selling price of agricultural products. Higher prices can be achieved by operating in niche markets such as organic and fair trade. Another way is to bring producers closer to consumers; peri-urban agriculture should have a role to play in tightening links between the “middle-class urban consumers” and farmers located around the cities. Although mainly used for forest areas, financing agro-forestry through carbon market mechanisms may also be relevant. However, initiatives outside forested areas are relatively scarce.

The third is political: Markets cannot do everything, and the State must contribute to the financing of the agro-ecological transition. Beyond support for investment and prices, public and private extension services need to be strengthened, as shown in the evaluation of several large-scale projects (Arslan *et al.*, 2013).

Box 11 : Concrete approaches for supporting young people to engage in agro-ecological models

Selection of CIRAD publications and videos on agro-ecology

<http://www.cirad.fr/nos-recherches/themes-de-recherche/agro-ecologie/videos>

<http://www.cirad.fr/nos-recherches/themes-de-recherche/agro-ecologie/selection-de-publications>

References

- AfDB, OECD, UNDP. (2015) African Economic Outlook 2015: Regional Development and Spatial Inclusion *OECD Publishing*, Paris. pp. 397.
- AfDB, OECD, UNDP, UNECA. (2012) African Economic Outlook 2012 Promoting Youth Employment: Promoting Youth Employment, *OECD Publishing*. pp. 79.
- Affholder F., Poeydebat C., Corbeels M., Scopel E., Titttonell P. (2013) The yield gap of major food crops in family agriculture in the tropics: Assessment and analysis through field surveys and modelling. *Field Crop Research* 143. pp. 106-188.
- AFSA. (2016) Agroecology: The Bold Future of Farming in Africa, *AFSA & TOAM*, Dar es Salaam Tanzania. pp. 88.
- Allen A., Howard J., Jamison K.M.A., Jayne T., Snyder J., Tschirley D.L., Yeboah F.K. (2016) Agrifood Youth Employment and Engagment Study, *Michigan State University, The Mastercard Foundation*. pp. 164.
- Alobo Loison S. (2015) Rural Livelihood Diversification in Sub-Saharan Africa: A Literature Review. *The Journal of Development Studies* 51. pp. 1125-1138.
- Anseeuw W., Jayne T., Kachule R., Kotsopoulos J. (2016) The Quiet Rise of Medium-Scale Farms in Malawi. *Land* 5. pp. 19.
- Antoine P. (2007) Introduction, Les relations intergénérationnelles en Afrique, Approche plurielle, *Centre Population et Développement*, Paris. pp. 9-18.
- Antoine P., Razafindrakoto M., Roubaud F. (2001) Contraints de rester jeunes ? Evolution de l'insertion dans trois capitales africaines: Dakar, Yaoundé, Antananarivo. *Autrepart* 18. pp. 17-36.
- Anyidoho N.A., Leavy J., Asenso-Okyere K. (2012) Perceptions and Aspirations: A Case Study of Young People in Ghana's Cocoa Sector. *IDS Bulletin* 43. pp. 20-32.
- Arrighi G., Aschoff N., Scully B. (2010) Accumulation by Dispossession and Its Limits: The Southern Africa Paradigm Revisited *Springer*, Heidelberg, Allemagne. pp. 29.
- Arslan A., Nancy M., Lipper L., Asfaw S., Cattaneo A. (2013) Adoption and intensity of adoption of conservation farming practices in Zambia, *FAO*, Rome. pp. 80.
- Ballard A.M.Z., Sitko N.J., Namonje-Kapembwa T. (2015) 51 Years of Zambian Agriculture, in: A. C. a. N. J. S. eds (Ed.), Agriculture in Zambia. Past, Present, and Future, *Indaba Agricultural Policy Research Insitute*. pp. 165.
- Barral S., Piroux M., Sourisseau J.-M., Valette E. (2014) Contributing to territorial dynamics, in: J.-M. Sourisseau (Ed.), Family farming and the Worlds to come, *Springer*, Dordrecht. pp. 111-127.
- Barro R.J., Lee J.W. (2013) A new data set of educational attainment in the world, 1950–2010. *Journal of Development Economics* 104. pp. 184-198.

Bélières J.-F., Bonnal P., Bosc P.-M., Losch B., Marzin J., Sourisseau J.-M. (2015) Family Farming Around the World. Definitions, contributions and public policies, *Agence Française de Développement*, Paris. pp. 190.

Betcherman G., Godfrey M., Puerto S., Rother F., Stavreska A. (2007) A Review of Interventions to Support Young Workers: Findings of the Youth Employment Inventory, Social Protection Working Paper *World Bank*. pp. 103.

Boserup E. (1965) The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure *Routledge*. pp. 124.

Boyer F., Guénard C. (2014) Sous-employés, chômeurs ou entrepreneurs : les jeunes face à l'emploi. *Autrepart* 71. pp. 3-31.

Bricas N., Tchamda C., Thirion M.-C. (2013) Consommation alimentaire en Afrique de l'Ouest et Centrale : les productions locales tirées par la demande urbaine mais les villes restent dépendantes des importations de riz et de blé, *Le Demeter* 2014. pp. 125-142.

Brooks K., Zorya S., Gautam A. (2013) Employment in agriculture: Jobs for Africa's youth, Global Food Policy Report *International Food Policy Research Institute (IFPRI)*, Washington, D.C. pp. 48-57.

Bryceson D.F. (1996) Desagrarianisation and rural employment. *World Development* 24. pp. 97-111.

Carletto G., Covarrubias K., Davis B., Krausova M., Stamoulis K., Winters P., Zezza A. (2007) Rural income generating activities in developing countries: re-assessing the evidence. *Journal of Agricultural and Development Economics* Vol. 4. pp. 146-193.

Chamberlin J., Jayne T.S., Headey D. (2014) Scarcity amidst abundance? Reassessing the potential for cropland expansion in Africa. *Food Policy* 48. pp. 51-65.

Chauveau J.-P. (2005) Introduction thématique : les jeunes ruraux à la croisée des chemins. *Afrique contemporaine* N°214. pp. 15-35.

Chinsinga B., Chasukwa M. (2012) Youth, Agriculture and Land Grabs in Malawi. *IDS Bulletin* 43. pp. 67-77.

Christiaensen L., Todo Y. (2014) Poverty Reduction During the Rural–Urban Transformation – The Role of the Missing Middle. *World Development* 63. pp. 43-58.

Cochet H. (2004) Agrarian Dynamics, Population Growth and Resource Management: The Case of Burundi. *GeoJournal* 60. pp. 111-122.

Cochet H. (2015) Comparative Agriculture *Springer Netherlands*. pp. 154.

Cochet H., Anseeuw W., Freguin-Gresh S. (2015) South Africa's Agrarian Question *HSRC Press*, Cape Town. pp. 358.

Cramer C., Oya C., Sender J. (2015) Lifting the blinkers. A new view of power, diversity, and poverty in Mozambican rural labour markets, Rural Wage Employment in Developing Countries: Theory, Evidence, and Policy, *Taylor & Francis*. pp. 69-100.

Crowder D.W., Reganold J.P. (2015) Financial competitiveness of organic agriculture on a global scale. *Proceedings of the National Academy of Sciences* 112. pp. 7611-7616.

- Day C. (2015) Education and Employment Transitions: The Experiences of Young People with Caring Responsibilities in Zambia. pp. 1-26.
- De Brauw A., Mueller V., Lee H.L. (2014) The Role of Rural–Urban Migration in the Structural Transformation of Sub-Saharan Africa. *World Development* 63. pp. 33-42.
- De Vletter F. (2007) Migration and development in Mozambique: poverty, inequality and survival. *Development Southern Africa* 24. pp. 137-153.
- De Vries G., Timmer M., De Vries K. (2015) Structural Transformation in Africa: Static Gains, Dynamic Losses. *The Journal of Development Studies* 51. pp. 674-688.
- Demirguc-Kunt A., Leora K., Dorothe S., Peter V.O. (2015) The Global Findex Database 2014: Measuring Financial Inclusion around the World, Policy Research Working Paper 7255, *World Bank*, Washington, DC. pp. 97.
- Devereux S., Guenther B. (2007) Social Protection and Agriculture in Ethiopia. Country case study paper prepared for a review commissioned by the FAO on 'Social Protection and Support to Small Farmer Development', *FAO*, Rome. pp. 18.
- Dimova R., Nordman C.J. (2014) Understanding the Links between Labour and Economic Development. *The European Journal of Development Research* 26. pp. 387-396.
- Doligez F., Bastiaensen J., Bédécarrats F., Labie M. (2016) L'inclusion financière, nouvel avatar de la libéralisation financière ? Introduction. *Revue Tiers Monde* 1/2016 (N° 225) pp. 9-20
- Dorin B., Hourcade J.C., Benoit-Cattin M. (2013) A World without Farmers? The Lewis Path Revisited., CIRE Working Paper 47-2013,, *CIRE*. pp. 22.
- Douillet M. (2011) La relance de la production agricole au Malawi : succès et limites *Fondation FARM*, Paris. pp. 46.
- Dugué P., Autfray P., Blanchard M., Djamen P., Dongmo A.L., Girard P., Olina J.-P., Ouedrago S., Sissoko F., Vall E. (2012) L'agroécologie pour l'agriculture familiale dans les pays du Sud : impasse ou voie d'avenir ? Le cas des zones de savane cotonnière de l'Afrique de l'Ouest et du Centre, Colloque René Dumont, Paris, 15 et 16 novembre 2012. pp. 23.
- Elder S., De Haas H., Principi M., Schewel K. (2015) Youth and rural development: Evidence from 25 schools-to-work transition surveys, in: I. L. Office (Ed.), *Work4Youth Publication Series n°29*, Geneva. pp. 78.
- Ellis F. (1999) Rural Livelihood Diversity in Developing Countries: Evidence and Policy Implications, *Overseas Development Institute*, London. pp. 10.
- Ellis F. (2004) Occupational Diversification in Developing Countries and Implications for Agricultural Policy, *DFID*, London. pp. 8.
- FANPRAN. (2012) Engaging Youth in Agricultural Policy Processes, Policy Brief Series. pp. 8.
- Fares J., Gauri V., Jimenez E.Y., Lundberg M.K.A., McKenzie D., Murthi M., Ridao-Cano C., Sinha N. (2006) World development report 2007 : development and the next generation, World development report, *World Bank Group*, Washington, DC. pp. 336.

Filmer D., Fox L. (2014) Youth Employment in Sub-Saharan Africa *World Bank*, Washington, DC. pp. 283.

Fioramonti L. (2013) Gross domestic problem: The politics behind the world's most powerful number *Zed Books*, London. pp. 208.

Fouillet C., Guérin I., Morvant-Roux S., Servet J.-M. (2016) De gré ou de force : le microcrédit comme dispositif néolibéral *Revue Tiers Monde* 1/2016 (N° 225) pp. 21-48

Fox L., Senbet L.W., Simbanegavi W. (2016) Youth Employment in Sub-Saharan Africa: Challenges, Constraints and Opportunities. *Journal of African Economies* 25. pp. i3-i15.

Fuglie K., Rada N. (2013) Resources, Policies, and Agricultural Productivity in Sub-Saharan Africa, *United States Department of Agriculture, Economic Research Service*. pp. 78.

Griffon M. (2013) Qu'est-ce que l'agriculture écologiquement intensive ? *Quae*. pp. 224.

Haddad L., Kato H., Meisel N. (2015) Growth is Dead, Long Live Growth: The Quality of Economic Growth and Why it Matters *JICA Research Institute, AFD, IDS*. pp. 1-19.

Haggblade S., Chapoto A., Drame-Yayé A., Hendriks S.L., Kabwe S., Minde I., Mugisha J., Terblanche S. (2015) Motivating and preparing African youth for successful careers in agribusiness: Insights from agricultural role models. *Journal of Agribusiness in Developing and Emerging Economies* 5. pp. 170-189.

Haggblade S., Hazell P., Reardon T. (2010) The Rural Non-farm Economy: Prospects for Growth and Poverty Reduction. *World Development* 38. pp. 1429-1441.

Haggblade S., Hazell P.B.R., Reardon T.A. (2007) Transforming the rural nonfarm economy, Opportunities and threats in the developing world *International Food Policy Research Institute (IFPRI) by Johns Hopkins University Press*, Baltimore, MD. pp. 514.

Honwana A. (2012) Chapter 1: Youth, The Time of Youth: Work, Social Change, and Politics in Africa, *Lynne Rienner*. pp. 1-19.

IAASTD. (2008) Agriculture at a crossroads. International Assessment of Agricultural Knowledge, Science and Technology for Development. Global Report, *Islandpress*, Washington. pp. 606.

ILO. (2015) Global Employment Trends for Youth 2015: Scaling up Investments in Decent Jobs for Youth, *ILO*, Geneva. pp. 98.

ILO. (2016) Social protection in Africa, *ILO*.

Ismail O. (2016) What Is in a Job? The Social Context of Youth Employment Issues in Africa. *Journal of African Economies* 25. pp. i37-i60.

Jayne T.S., Chapoto A., Sitko N., Muyanga M., Nkonde C., Chamberlin J. (2014) Africa's changing farm structure and employment challenge, Policy synthesis n°91, *USAID, MSU*. pp. 5.

Kaneene J.B., Haggblade S., Tschirley D.L. (2015) Special issue introduction: Sub-Saharan Africa's agri-food system in transition. *Journal of Agribusiness in Developing and Emerging Economies* 5. pp. 94-101.

- Koenig B. (2014) Les économies occultes du « broutage » des jeunes Abidjanais : une dialectique culturelle du changement générationnel. *Autrepart* 71. pp. 195-215.
- Koira A.K. (2014) Agribusiness in sub-Saharan Africa: Pathways for developing innovative programs for youth and the rural poor, *The MasterCard Foundation*. pp. 23.
- Kpessa M.W. (2010) Ideas, Institutions, and Welfare Program Typologies: An Analysis of Pensions and Old Age Income Protection Policies in Sub-Saharan Africa. *Poverty & Public Policy* Vol. 2. pp. 37-65.
- Kuépié M. (2012) L'impact de la solidarité familiale sur le niveau de vie et la pauvreté des personnes âgées au Mali. *Canadian Journal of Development Studies / Revue canadienne d'études du développement* 33. pp. 198-213.
- Kuépié M., Shapiro D., Tenikue M. (2015) Access to Schooling and Staying in School in Selected Sub-Saharan African Countries *African Development Review* 27. pp. 403-414.
- Lavigne-Delville P., Toulmin C., Colin J.-P., Chauveau J.-P. (2002) Negotiating access to land in west Africa : a synthesis of findings from research on derived rights to land *IIED*, Londres, Royaume-Uni. pp. 128.
- Leavy J., Smith S. (2010) Future Farmers: Youth Aspirations, Expectations and Life Choices, Discussion Paper 03, *Future Agricultures*, London. pp. 15.
- Lee J.-W., Lee H. (2016) Human capital in the long run. *Journal of Development Economics* 122. pp. 147-169.
- Levard L., Dumazert P. (2015) Quels changements techniques pour développer l'emploi dans l'agriculture ?, Les exclusions paysannes : quels impacts sur le marché international du travail ?, *Agence Française de Développement*, Paris. pp. 208-218.
- Levard L., Vogel A., Castellanet C., Pillot D. (2014) Agroécologie : évaluation de 15 ans d'actions d'accompagnement de l'AFD. Synthèse du rapport final, Evaluation de l'AFD Ex Post, *Agence Française de Développement*, Paris pp. 24.
- Losch B. (2016a) A structural transformation to boost youth labour demand in sub-Saharan Africa: The role of agriculture, rural areas and territorial development, Working Paper n°204, *ILO*, Geneva. pp. 80.
- Losch B. (2016b) Youth employment: A challenge for the continent, in: L. B. I. J. Pesche Denis (Ed.), A new emerging rural world - an overview of rural change in Africa, *Cirad, Nepad*, Montpellier, France. pp. 18-19.
- Losch B., Freguin-Gresh S., White E.T. (2012) Structural Transformation and Rural Change Revisited: Challenges for Late Developing Countries in a Globalizing World *World Bank Publications*. pp. 306.
- Losch B., Giordano T., Marzin J., Michaud A. (2016a) Rural development policy in perspective: lessons from country case studies and implications for rural development strategies in developing countries. Background paper for the OECD Development Centre's program "Rural Development Policy in Perspective", *UMR Art-Dev*, Montpellier, France. pp. 28.
- Losch B., Pesche D., Magrin G., Imbernon J. (2016b) Regaining control of territorial development, in: L. B. I. J. Pesche Denis (Ed.), A new emerging rural world - an overview of rural change in Africa, *Cirad, Nepad*, Montpellier, France. pp. 12-14.

- Marchand O., Thélot C. (1999) Le travail en France 1800-2000 *Armand Colin* pp. 269.
- Mauger G. (2010) Jeunesse : essai de construction d'objet. *Agora débats/jeunesses* 56. pp. 9-24.
- McMillan M., Rodrik D., Verduzco-Gallo Í. (2014) Globalization, Structural Change, and Productivity Growth, with an Update on Africa. *World Development* 63. pp. 11-32.
- Mercandalli S. (2015) Migrations et recompositions des stratégies socio-économiques des familles rurales au Mozambique: une lecture institutionnelle des circulations contemporaines. *Mondes en développement* n° 172. pp. 33-52.
- Mercandalli S. (2016) L'agroalimentaire, une opportunité pour l'emploi des jeunes?, Jeunesses rurales africaines : contours, aspirations et perspectives. pp. 31-32.
- Mercandalli S., Anseeuw W. (2014) Migrations et stratégies des familles mozambicaines : réflexions sur une politique intégrée de développement rural. *Revue Tiers Monde* N°220 octobre-décembre 2014. pp. 63-81.
- Mercandalli S., Nshimbi C. (2016) Migration dynamics: constrained patterns, diversity and potential, in: L. B. I. J. Pesche Denis (Ed.), *A New Emerging Rural World - An Overview of Change in Africa CIRAD*, Montpellier, France. pp. 22-23.
- Mounier A. (2016) Critique de l'économie politique du développement et de la croissance : théories, idéologies et politiques *Bréal*, Levallois-Perret. pp. 444.
- Mueller B.E.T. (2017) Fair for whom? A cautionary tale about leaving labour out why poverty reduction efforts must not ignore labour, *Global Labour Column*.
- Nolte K., Chamberlain W., Giger M. (2016) International Land Deals for Agriculture. Fresh insights from the Land Matrix: Analytical Report II., *Centre for Development and Environment, University of Bern; Centre de coopération internationale en recherche agronomique pour le développement; German Institute of Global and Area Studies; University of Pretoria*, Bern, Montpellier, Hamburg, Pretoria. pp. 68.
- Nordman C.J., Pasquier-Doumer L. (2012) Vocational education, on-the-job training and labour market integration of young workers in urban West Africa, Document de travail, *UMR DIAL*. pp. 43.
- Okali C., Sumberg J. (2012) Quick Money and Power: Tomatoes and Livelihood Building in Rural Brong Ahafo, Ghana. *IDS Bulletin* 43. pp. 44-57.
- Oketch M. (2015) Education Policy, Vocational Training, and the Youth in Sub-Saharan Africa, African Youth and the Persistence of Marginalization: Employment, Politics, and Prospects for Change, *Taylor & Francis*, New-York. pp. 133-151.
- Oya C. (2010) Rural inequality, wage employment and labour market formation in Africa: Historical and micro-level evidence, in: W. Paper (Ed.), *International Labour Office*, Geneva. pp. 49.
- Oya C., Pontara N. (2015) Understanding rural wage employment in developing countries, *Rural Wage Employment in Developing Countries: Theory, Evidence, and Policy*, *Taylor & Francis*. pp. 1-36.
- Pesche D., Losch B., Imbernon J., (eds). (2016) *A New Emerging Rural World - An Overview of Change in Africa NEPAD - CIRAD* pp. 76.

- Petit M. (2011) Pour une agriculture mondiale, productive et durable *Editions Quae*, Paris. pp. 112.
- Phélinas P. (2014) Comment mesurer l'emploi dans les pays en développement ? *Revue Tiers Monde* 2. pp. 15-33.
- Potts D. (2010) Circular migration in Zimbabwe and contemporary Sub-Saharan Africa *Boydell & Brewer*. pp. 312.
- Potts D. (2012) Whatever happened to Africa's rapid urbanisation?, Working Paper, *African Research Institute*. pp. 20.
- Potts D. (2013) Rural-Urban and Urban-Rural Migration Flows as Indicators of Economic Opportunity in Sub-Saharan Africa: What Do the Data Tell Us?, Migrating Out of Poverty Research Programme Working Paper, *University of Sussex*, Brighton. pp. 40.
- Pretty J., Toulmin C., Williams S. (2011) Sustainable intensification in African agriculture. *International Journal of Agricultural Sustainability* 9. pp. 5-24.
- Pritchett L. (2013) The Rebirth of Education, CDG Brief September 2013, *Center For Global Development*. pp. 4.
- Proctor F., Lucchesi V. (2012) Small-scale farming and youth in an era of rapid rural change *IIED/HIVOS*, London/The Hague. pp. 74.
- Resnick D., Thurlow J. (2015) Introduction: African Youth at a Crossroads African Youth and the Persistence of Marginalization: Employment, Politics, and Prospects for Change, *Taylor & Francis*, New-York. pp. 1-21.
- Rother F. (2006) Interventions to Support Young Workers in Sub Saharan Africa. Regional Report for the Youth Employment Inventory, *World Bank*. pp. 27.
- Roudart L. (2009) Terres cultivables et terres cultivées : apports de l'analyse croisée de trois bases de données à l'échelle mondiale. pp. 59.
- Sitko N., Chamberlin J. (2015) The Anatomy of Medium-Scale Farm Growth in Zambia: What are the Implications for the Future of Smallholder Agriculture? *Land* 4. pp. 869-887.
- Sitko N.J., Chamberlin J. (2016) The geography of Zambia's customary land: Assessing the prospects for smallholder development. *Land Use Policy* 55. pp. 49-60.
- Sitko N.J., Jayne T.S. (2014) Structural transformation or elite land capture? The growth of "emergent" farmers in Zambia. *Food Policy* 48. pp. 194-202.
- Sourisseau J.-M., Rasolofo P., Bélières J.-F., Guengant J.-P., Ramanitrinony H.K., Bourgeois R., Razafimiarantsoa T.T., Andrianantoandro V.T., Ramarijaona M., Burnod P., Rabeandriamaro H., Bognoux N. (2016) Diagnostic territorial de la région du Vakinankaratra à Madagascar, *AFD*, s.l., France. pp. 157.
- Sourisseau J.-M.E. (Ed.) (2015) Family Farming and the Worlds to Come, *Springer Netherlands*. pp. 361.
- Sumberg J., Anyidoho N.A., Chasukwa M., Chinsinga B., Leavy J., Tadele G., Whitfield S., Yaro J.A. (2015) Young People, Agriculture and Employment in Rural Africa African Youth and the Persistence of

Marginalization: Employment, Politics, and Prospects for Change, *Taylor & Francis*, New-York. pp. 111-132.

Sumberg J., Anyidoho N.A., Leavy J., te Lintelo D.J.H., Wellard K. (2012) Introduction: The Young People and Agriculture 'Problem' in Africa. *IDS Bulletin* 43. pp. 1-8.

Tacoli C. (1998) Rural-urban interactions: a guide to the literature. *Environment and Urbanization* 10. pp. 147-166.

Tacoli C. (2004) Rural-Urban Linkages and Pro-Poor Agricultural Growth: An Overview. Prepared for OECD DAC POVNET Agriculture and Pro-Poor Growth Task Team Helsinki Workshop, 17-18 June 2004. pp. 18.

Te Lintelo D.J.H. (2012) Young People in African (Agricultural) Policy Processes? What National Youth Policies Can Tell Us. *IDS Bulletin* 43. pp. 90-103.

Thurlow J. (2015) Youth Employment Prospects in Africa, African Youth and the Persistence of Marginalization: Employment, Politics, and Prospects for Change, *Taylor & Francis*, New-York. pp. 23-46.

Timmer C.P. (2009) A World Without Agriculture: The Structural Transformation in Historical Perspective *AEI Press*. pp. 96.

Tirivayi N., Knowles M., Davis B. (2013) The interaction between social protection and agriculture. A review of evidence, *FAO*, Rome. pp. 98.

Toillier A., Girard P. (2016) Comment les organisations de producteurs peuvent-elles accompagner leurs membres vers l'intensification écologique ? Se doter d'une politique agro-environnementale et communiquer : le choix de l'UGCPA/BM au Burkina-Faso, Champs d'acteurs, *FARM*, Paris, France. pp. 75.

Tschirley D.L., Snyder J., Dolislager M., Reardon T., Haggblade S., Goeb J., Traub L., Ejobi F., Meyer F. (2015) Africa's unfolding diet transformation: implications for agrifood system employment. *Journal of Agribusiness in Developing and Emerging Economies* 5. pp. 102-136.

UN-DESA. (2016) International Migration Report 2015: Highlights. pp. 36.

United Nations D.o.E.a.S.A., Population Division. (2014) World Urbanization Prospects: The 2014 Revision Highlights. pp. 32.

Vargas-Lundius R., Suttie D. (2014) Youth: Investing in young rural people for sustainable and equitable development, *IFAD*, Rome. pp. 65.

Wampfler B., Doligez F., Lapenu C. (2009) Organisations professionnelles agricoles et institutions financières rurales : construire une nouvelle alliance au service de l'agriculture familiale *Réseau CERISE*. pp. 146.

White B. (2012) Agriculture and the Generation Problem: Rural Youth, Employment and the Future of Farming. *IDS Bulletin* 43. pp. 9-19.

Woodhouse P. (2003) African Enclosures: A Default Mode of Development. *World Development* 31. pp. 1705-1720.

World Bank. (2012) Growing Africa, Unlocking the Potential of Agribusiness, *World Bank*, Washington D.C. pp. 162.

Worth N. (2009) Understanding youth transition as 'Becoming': Identity, time and futurity. *Geoforum* 40. pp. 1050-1060.

Yeboah F.K., Jayne T.S. (2016) Africa's evolving employment structure, *Michigan State University*. pp. 102.

Yumkella K.K., Kormawa P.M., Roepstorff T.M., Hawkins A.M. (2011) Agribusiness for Africa's Prosperity Vienna. pp. 347.

Datasets

Barro R.J., Lee J.-W. (2013) Educational Attainment dataset. v. 2.1, Feb. 2016: <http://barrolee.com/>

FAO (2011) and FAO (2013), Food and Alimentation Organization of the United Nations: <http://www.fao.org/statistics/databases/en/>

Internet World Statistics. (2015) : <http://www.internetworldstats.com/>

WDI (2014) World Development Indicators, The World Bank: <http://data.worldbank.org/data-catalog/world-development-indicators>

WPP (2015) United Nations D.o.E.a.S.A., Population Division, World Population Prospects, the 2015 Revision: <https://esa.un.org/unpd/wpp/>