The future of youth in agricultural value chains in Ethiopia and Kenya

Report

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Abstract

Increasing youth involvement in the entire agricultural value chain can improve food security and can diminish (youth) unemployment. The purpose of this study is to assess where, in the farming systems and the whole of the agricultural value chain, youth is present and to understand the perspective of youth on agriculture. The study aimed at identifying conditions that are useful to analyse the attractiveness- and influence the involvement of male and female youth in maize and potato value chains in Ethiopia and Kenya. To create an in-depth picture of the situation both scientific literature and qualitative data was used. Interviews with 11 experts, from both countries, who work with youth and/or agriculture and 6 youth were conducted to obtain information about their perceptions on the agricultural value chain. In this report youth is defined by age and as a social construct. Organisations need to look beyond statistics to see who youth really are in the context of their society. Inclusion of women should also be considered. Amongst youth there is lack of interest in the agricultural sector, youth prefer white-collar jobs, and agriculture is considered as employment for poor, uneducated and old people. In the potato and maize value chains youth is pushed away because of the multiplicity of actors, poor communication, bad infrastructures and inefficient linkages between production sites and markets. To increase youth involvement the main conditions that need to be considered and improved are: perception and aspirations, finance, income, land ownership, infrastructure and education.

Keywords: value chain; farming system; youth; maize; potatoes; gender; youth inclusion; youth involvement.

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Introduction

Over the world the ageing of farmer communities is a growing phenomenon (FAO, (b), 2014). The average age of farmers is rising, which indicates youth is less frequently entering farming as a profession. In Africa, this situation is not different. Youth is abandoning agriculture, and often migrates to urban areas in search of employment (White, 2012). Therefore it can be said that there is a 'succession gap' in agriculture. In the future, this could cause decreases in production levels, as the old generation will retire. An important consequence of this development relates to food security. With decreasing levels of food production, and on the other hand with increasing population levels and changing wealth and consumption patterns, will there still be enough food production to feed the generations to come?

Furthermore, most African economies heavily depend on their agricultural sector (World Bank, 2013). Decreasing production levels could then significantly affect economic development. Another issue relating to this scenario is underemployment. Because agriculture is not seen anymore as an attractive profession, young workers often decide to migrate to urban areas. Cities are frequently seen as areas with more promising job and career opportunities, however in practice this is often quite the contrary. Underemployment in urban areas is also common, due to a mismatch between the capabilities of youth and the jobs available to them through their network (Bezu & Holden, 2014). These problems could be diminished by increasing youth involvement in the entire agricultural value chain and therefore our overall goal has been formulated as:

Increase the involvement of youth in agricultural value chains in Kenya and Ethiopia to increase food security and employment.

Through this project we firstly assess where in the agricultural value chain youth is present, after which we will examine the perspective of youth on agriculture. Lastly we will identify conditions that can be used to analyse the attractiveness of the agricultural value chain. We use the following research question as guideline:

Which conditions influence the involvement of male and female youth in specific value chains within the agricultural sector in Ethiopia and Kenya?

To divide this main question into workable parts we defined the following sub questions:

1. *What do the maize and potato value chains look like in Ethiopia and Kenya, also regarding youth involvement?*
2. *What is the perspective of organisations working with youth and youth themselves on youth involvement in the agricultural value chain?*
3. *Which conditions influence the involvement of youth in specific value chains within the agricultural sector?*

Youth

The definition of youth we use in this report is a combination of a statistical and social definition. The statistical definition of age is derived from the African Youth Charter from the African Union, which labels men, and women from the age of 15-35 as youth (African Union, 2006). Youth, however, cannot be defined by age alone, but must be seen as a social construct. This means that they are defined by themselves, by society and by culture. The social definition of youth differs from place to place and always need to be adapted to the specific context in which one work. In this report we see youth as defined both by age and as a social construct. In the chapter on youth we will elaborate on this.

Gender

Gender is an important factor for this report. Gender is not only a biological difference between male and female, but "rather [...] a cultural construction whose legitimacy is justified through references to biology" (Kaarsholm and Hultin, 1994, p. 211). In every society there is more or less an (common) understanding of the relationship between male and female, and about the specific roles that are related to gender. In Kenya 51,5% of people working in agriculture were male, while 48,5% were female in 2014. In Ethiopia this division was 55% male and 45% female (FAO (b), n.d.). For this study, it needs to be considered that due to globalisation and access to Internet, the traditional gender perspective could be altered for today's youth in Africa.

Economics and politics

As we look at agricultural value chains in Kenya and Ethiopia in detail, it is useful to first provide an economic and political background of these countries. By providing the context, it will become clear why certain value chains are shaped the way they are.

Kenyan economy and politics

Kenya has experienced relatively high economic growth rates compared to other African countries (Afande, Maina and Maina, 2015). At the moment their Gross Domestic Product (GDP) per capita is around 1358 US$ (World Bank (b), n.d.) The Kenyan economy is projected to maintain growing and investments in infrastructure and ICT facilitate this (World Bank, 2015). According to the World Bank, Kenya can be classified as a lower- to middle income economy (World Bank, 2015). Therefore it can be seen as one of the most developed countries on the African continent, as most African countries are classified as low-income countries.

The agricultural sector is important, as it comprises about 30% of total GDP and it is the largest sector in the economy (NCTI (b), n.d.). Furthermore, around 75% of Kenyans live in rural areas, where agriculture is the largest profession (World Bank (b), n.d.), although it accounts for only the 45% of the total salary earnings (FAO 2014). The largest producing sectors within agriculture are horticulture, livestock and cereal (maize) (FAO (b) n.d.). According to the Agricultural Sector Development Strategy agriculture covers 65% of the total exports. Moreover 18% of formal workers and 70% of informal workers in rural areas are employed in agriculture. Therefore because of its weight on the country's economy improvements in agricultural wages would have large benefits on diminishing poverty among Kenyans (Njeru and Gichimu, 2014).

Currently, the Kenyan government tries to reinforce and strengthen growth by investments in infrastructure and institutions (World Bank, 2015). In the agenda great relevance is given to reforms that would have an impact on social and economic outcomes, like youth involvement and equal distribution of resources, perceiving agriculture as a key sector. Main policy goals for the sector are increasing production, market access, and sustainability, improving institutions and legal policy for agriculture, and promoting private sector participation (Fapda, n.d.).

Table 1 Production of potatoes and maize in Kenya

Kenya	**Maize**	**Potatoes**
Total production	3.600.000 tons	2.915.067 tons

Hectares cultivated	1.200.000	360.000
Average yield per ha	3 t/ha	7,7 t/ha
Production value	483.817.000 Int$	472.655.000 Int$
Influence on GDP	0,79%	0,77%
Imports quantity	258.525 tons*	n.a.
Imports value	88.757.000 $*	n.a.
Consumption quantity [kcal/capita/day]	671	93

(Source: FAOSTAT (2015); World Bank, (a), 2015)) * Maize bran not included

Ethiopian economy and politics

Ethiopia's GDP per capita is around 565 US$. This classifies Ethiopia as a low-income country (World Bank (a), 2015). However the economy is growing rapidly, with recent GDP growth rates of around 10% per year (World Bank (c), n.d.). This causes poverty rates to decline and one government goal is to further reduce this rate and reach a middle-income status in the coming years (World Bank, 2015).

Agriculture is the largest sector and accounts for 42,3% of GDP value added in 2010-2014 (World Bank (c), n.d.). This dependency on agriculture causes risks for the economy, as Ethiopia faces soil degradation and regular droughts, which negatively influence yields (NCTI (a), n.d.). In 2014, 75% of the population was working in agriculture and the highest producing sectors are livestock and cereals.

At the moment, the Ethiopian government is focusing on development, and is setting aside a large part of its budget for investment and pro-poor development (World Bank, 2015). Agriculture is recognised as the most important sector and the government has set up policies to increase agricultural productivity and sustainability. Together with the World Bank they created Agricultural Growth projects (World Bank, 2015), but, according to the World Bank ((c), 2015), the government still has some step to take in improving governance and increasing accountability towards citizens.

Table 2 Production of potato and maize in Ethiopia

Ethiopia	**Maize**	**Potatoes**
Total production	6.158.318 tons	863.348 tons
Hectares cultivated	1.963.200	150.000
Average yield	3 t/ha	6 t/ha
Production value	780.290.000 Int$	134.966.000 Int$
Influence on GDP	1,4%	0,025%
Export quantity	60.148 tons	45.076 tons
Export value	14.923.000 $	n.a.
Consumption quantity [kcal/capita/day]	405	n.a.

(Source: FAOSTAT (2015); World Bank, (a), (2015))

Value chain

When using the term value chain it is important to clarify in which way this concept is going to be used further on. In common usage, as in most definitions, the term value chain is seen with a connection to "inter-organisational links and relationships".

The agricultural value chain concept does not have a universally accepted definition. However when referring to the primary sector, the value chain, implicitly, includes all the necessary steps, from the producer to the consumer, to deliver the final product. The definition of value chain has been adapted by large agencies for the environment in which they work. The definition that, in our opinion, fits the agricultural context of Ethiopia and Kenya best, has been provided by the World Bank:

- "The term ''value chain'' describes the full range of value adding activities required to bring a product or service through the different phases of production, including procurement of raw materials and other inputs" (Webber and Labaste, 2010).

The term value chain, is often used to particularly identify strong or weak activities, firms or industries that impact the value perception for the end customer.

In this report the term value chain will always be used in relation to the agricultural sector, with a special interest in youth involvement. In particular we will focus on the value chain of maize and potatoes. This choice has been made because both crops, in Kenya and Ethiopia, are fundamental for the local diet and because of their weight on the respective GDP (Cromme et al., 2010). These crops also occupy a high proportion of arable land (Gildemacher et al., 2009).
Through value chain analysis of these crops, the steps and conditions that particularly enable or inhibit youth involvement can be identified.

Farming systems

When looking at climate, we see that Ethiopia and Kenya have several similarities; therefore we decided to provide a general overview of both countries together to visualize the context. The areas have a wide range of agro-ecological zones. This is mainly due to the fact that altitudes vary from 126 meters below sea level to 5000 meters above sea level in the highlands. The countries can be divided in three main agro-ecological zones, based on different altitudes that influence rainfalls and moisture index (FAO (a,b) 2006). The countries, however, differ with respect to the percentages of land situated in those zones. This leads to differences in average temperature, moisture index and vegetation.

Table 3 Overview with generalised information on agro-ecological zones in Kenya and Ethiopia

Region	Potential of agricultural land	Elevation above sea level	Rainfall (mm)	Temperature (°C)	Moisture Index	Main farming system	Additional information
Humid	High	> 1500	1000-2700	<18	> 50%	Mixed crop-livestock	Main commercial products are cash crops (coffee, tea, horticulture) and dairy products.

Semi-humid to semi-arid	Medium	1000-2000	300-1100	18-22	25-50%	Mixed crop-livestock	Due to low moisture index preference for more drought tolerant crops.
Arid	Low	<1200	100-600	22-40	15-25%	Livestock (nomadic pastoralism)	Mainly beef and small ruminants. Farmers have to deal with frequent droughts and diseases

(Source: FAO, (a,b) 2006; Jabbar et al., 2000)

We decided to focus our attention to the humid to semi-arid zone only, where mostly mixed crop-livestock systems are present. Even though large parts of the countries are situated in the arid zone, we decided to not include this zone, because of the low population density and the impediments of growing crops there.

In order to elaborate on agriculture in Ethiopia and Kenya we need to define the key concept of farming systems. Dixon et al. (2001) state that 'farm systems are organised to produce food and to meet other household goals through the management of available resources'. He defines a farm system as 'the household, its resources, and the resource flows and interactions at individual farm level together' (Dixon et al., 2001). Farming systems (plural) are multiple dimension systems. They are structured by humans through management and design, but influenced by nature. We will use the following FAO definition of farming systems: 'A population of individual farm systems that have broadly similar resource bases, enterprise patterns [and] household livelihoods and constraints […]' (FAO (a), n.d.). Because of these similarities, farms grouped under the same farming system can be approached and evaluated in the same way.

It can be seen that farming systems and value chains are two different constructs, both of which will be used in this report. However they need to be seen as separate, sometimes even conflicting constructs. Farming systems provide an output, production, which continues its way down a value chain. However, looking at the construct of farming systems, it can be seen that farming systems are more than just a step in the value chain, and likewise, value chains are broader than just the production supply chain.

Focus of the project

When taking all the above-mentioned information into account, the projects focus will be on youth as the age group of 15-35, but also take their social status into account together with the cultural gender differences. To be able to perform an in-depth assessment of the value chains, we decided to focus on 2 specific value chains: maize and potatoes, in the semi-arid zones. Firstly we will examine the related farming systems, for which we will focus on small-scale farmers, as they make up the majority of the farmer population. From there on we will move up the value chain and investigate in which ways value is added to the products and what channels are being used. Meanwhile we will pay attention to the political and economic situation of the specific countries and to the ways and amount of support that is already provided to youth as they influence the agricultural environment. The information from literature will be supported by information from interviews with professionals and youth.

Methodology

We used qualitative data to create an in-depth picture of the situation of agricultural value chains in Ethiopia and Kenya. The commissioners asked us to execute interviews in order to obtain stories and explanations on why youth is less involved in agriculture nowadays. This led us to the decision that our research would be twofold. Firstly we did a literature research to provide a strong scientific base and understand the situation from an academic standpoint. In this research we analysed farming systems, the agricultural value chains of maize and potato in Kenya and Ethiopia, and theories about youth inclusion herein. Literature was obtained using scientific databases such as ScienceDirect and Scopus. Afterwards, we conducted semi-structured interviews. Reasoning behind choosing semi-structured interviews is that in this way we could prepare some topics that needed to be discussed, while still being open to additional information. Because we were interested in perceptions and experiences, this openness is important to understand clearly why participants have a certain viewpoint. It is important not to steer them in a certain direction, which would make it difficult to obtain their honest opinions.

Interviews were conducted with 11 experts, from both countries, who are employed in organisations that work with youth and/or agricultural value chains. The purpose was to obtain their theories and experiences on the involvement of youth in the agricultural value chain, and the conditions they consider important for youth to be included. Furthermore, 6 youth were interviewed about their perceptions on the agricultural value chain and their situations. 5 of these youth were from Kenya and one from Ethiopia. This inequality was due to practical difficulties, such as obtaining contact information and communication issues, as Ethiopian youth often does not speak English. The information obtained was used to provide anecdotal information from personal views and experiences. The insights obtained from the interviews are personal and professional experiences and perceptions, and do not represent a general point of view. All respondents were asked whether they agreed with the use of their name and information in our report, and were asked afterwards whether the information given by them was accurately written down. Interviewees from Ethiopia were for reasons of privacy and security anonimised. Information obtained from both literature research and interviews has been analysed and incorporated in our final report, on which we provided a discussion and have drawn conclusions.

Following the analysis, with the information from the interviews, a dashboard has been created so that development organisations can use it to assess conditions that can be triggered to improve youth involvement in the agricultural value chain.

Youth and gender

In this chapter we especially look to youth and gender as a social construct. This findings are derived from literature, but also from the interviews we did with professionals working with youth or from the youth themselves, we interviewed in both Kenya and Ethiopia.

Youth as a construct

Whenever we look for a definition of youth we have to keep in mind that youth is never an homogenous group but is interpreted differently in any situation or society (Durham, 2000). This reality makes it difficult to give a comprehensive definition of youth. A part of the definition seems to be fixed in age. The United Nations, in conducting its work, defines youth as any individual in the age range of 15-24 years old (U.N., 2001). The African Union defines youth as people from the age of 15-35 (African Union, 2006).

In contrast to these definitions of youth, Waldie (2004) states that in defining youth, age alone is an inadequate descriptor. So, although age is an important aspect of defining youth, it is also a problematic one. To give an example: females often are not categorised as youth from the moment they are married, since their marriage brings status and responsibility. While on the other hand males can be categorised as youth until their 30s or 40s (Durham, 2000). Youth are a fluid flexible group, or "shifters" as called by Durham (2000, p. 117), which means that youth are the 'in-between', and do not belong to a specific age group. They should be defined as social being and social becoming (Christiansen et al., 2006). Which means that they are who they are at this moment, as persons living their lives, but at the same moment are in the movement of becoming somebody, focussing and working towards an ideal goal, described as a "position in movement" (Christiansen et al., 2006, p. 10). Being youth, according to Bayart means that it is a "struggle for influence and authority" (1993 in Christiansen et al., 2006, p.11). The definition of youth is not fixed through space and time, but is a matter of context and interpretation. The same person can on the same day be seen as youth, for example at home, while in the situation of work the same person can be regarded as adult (Christiansen et al., 2006).

Another characteristic of youth is that they are flexible and often and easily on the move. They navigate their lives through continuous changing circumstances and are able to adapt to the changes and developments of society (Christiansen et al., 2006). This flexibility can be problematic as well, as phrased by Abbink when he says that youth "are vulnerable and dependent, especially in urban areas, with a lack of constructive social incentives in society (…) this makes them look elsewhere for survival or opportunities" (2005, p. 2). This vulnerability, partly caused by society is often referred in the academic world, but also in practice. This relates to the remark of Durham (2000, p.114) that: "youth are particularly sensitive to transformations in the economy as their activities, prospects and ambitions are dislocated and redirected". Due to social media and internet they have access to the broader world and, as a result, are easily on the move and increasingly look for opportunities to transform their lives. This sensitiveness to transformations, in economy, culture, religion, structure is crucial in defining youth.

Agency and Structure

By defining youth we need to take the concepts of agency and structure into consideration. The concept of agency and structure means that youth are their own agents in shaping their lives, with their own individual capacities. Nevertheless they are bound to certain structures, which exist within society. These structures can be cultural (e.g. class differences), social (e.g. level of education or gender) or economical (e.g. lack of financial support). So youth are agents shaping their own lives within the given structure of society. Especially in current societies and globalisation the emphasis is increasingly on seeing young people as social actors who ought to be respected in their own right (Valentine, 1996; Holloway and Valentine, 2000).

Definition of youth by Ethiopians and Kenyans

Our respondents, both the professionals and the youth, gave us their definition of youth in the interviews. We will elaborate on their definitions in this paragraph and link them to the definitions given by the literature.

Youth is defined in many cases statistically, with an age ranging from 15-40. Some interviewees focussed also more on the social characteristics of youth. This means that they have their specific place or role in society,

which is characterised by being not bound to formal positions and not bound to a family or marriage. Having little responsibility is a characteristic of youth, which is often expressed as responsibility for a family. For example you can be considered as youth: “If you are not married, have no children, even if you are 45” (James Kamotho, personal communication, 28 September 2015). Also having capital is a characteristic of the transformation from youth to adults, “As soon as they have enough money and a family they start to take part in the community” (Interviewee number 3, personal communication, 5 October 2015).

Interviewee number 1 defines youth as relational, youth exist in relation to the older, as she says: “Youth are community members, they need to take the example of the elder, they cannot stand by themselves, according to the elder” (personal communication, 1 October 2015). This is what in the literature is defined as the ‘in-between’ part, ‘not-yet’ or the ‘shifters’, those who do not yet belong to the adults, and therefore according to the older generation can’t stand by themselves. Interviewee number 2 sees youth as those who “have free spirit” (personal communication, 1 October 2015) which link to the concept that youth are less bound by rules and traditions. Based on the cultural tradition, youth are not the ones that can stand up and share their vision and opinion. Interviewee number 4, from Ethiopia argues that we have to make youth “active actors” (personal communication, 6 October 2015). This relates to the concept to see the own agency of youth. At this moment many feel restricted and bounded in the traditional structures of society, in which youth cannot speak up until they are old enough or married, in order to join the elders in the community. The awareness, also amongst the experts is that youth need to see, and increasingly are seeing, themselves as agents which need to shape their lives.

The characteristic that youth easily transform their lives comes back in the interviews. Youth are very mobile, and move back and forth between their homes and the cities. They transform their lives from the rural areas, where they were raised in a traditional way, to the cities where they start their own new lives. Youth are not bounded to fixed places as many of their parents were. Their mobility is also mentioned by themselves as a characteristic of their group as Victone Onyango says: “youth tend to be mostly mobile” (personal communication, 02-10-2015).

Based on literature and the different views on youth from the respondents the first characteristic of youth is that they are never a fixed category, which can only be described by age. They should be characterised by their social position of ‘in-betweens’ or ‘not-yet’. So, whenever organisations in the field work with youth, they need to define youth in the specific context in which they are working. They should consult the youth and the community in order to make sure both the community and the professionals are interpreting youth in the same way. Since youth is a social construct, social factors as the role of community, tradition, society, economic, politics need to be taken into consideration when one is working with youth. Age can be the easiest definition to work with, but is often inaccurate and does in many cases not match the reality and perceived definition of the communities themselves.

Gender, employment and activities

Often, when looking at youth, only men are taken into account. As indicated above, this is because women marry at a young age, and face responsibilities. However if we look at the most used definitions of youth that are defined by age, women are presumed to be part of this. Furthermore, if we look at poverty in relation to gender we can consider that females often are more vulnerable than males. Reasons for this are their access and entitlement of land, a lack of capital and several other resources that are necessary for farming, lower education level and increased work burden (FAO, 2009). Other causes for their vulnerability already take place during education, where more effort is given to males since females have to do domestic activities. Gender is also visible in the different activities that men and women undertake in their jobs. Assumptions are that quality, consistency and speed are female attributes, while the more physical work is executed mostly by men. Mobility, or migration today is not gender related, women are also increasingly mobile (Dolan and Sutherland, 2002). Furthermore, according to White (2012), women should be seen as the future generation of farmers, as they form already a large part of today's small-scale farmers and undertake the responsibility of feeding their families. This indicates specific attention needs to be given to gender and in specific the relation of women in agriculture and youth policies, as it is not always clear where women fit in and how they can be targeted

Kenya

In Kenya employment is highly gendered. Youth all aspire some form of employment, however the types of

employment perceived as appropriate for males and females differ. For instance, women can work in hair salons, which are not appropriate for men, as it is not accepted for them to touch a married woman's hair. Furthermore, men are supposed to do the heavy work, while women are expected to fetch water and sell the produce. However Kenyan women too are expected to work on farms, especially if they married a farmer. This is not preferred by them, because they often have to work hard without having access to the generated money. On the other hand women are able to rent their own land, but often do not have the money to do so, and the land can be taken back any time, which creates uncertainties (FAO, (a), 2014). According to Douglas Onyango, women are often the ones staying behind in rural areas while men migrate to work in cities (personal communication, 28th September 2015). Yvonne Omwodo also indicates that she approximates the share of male/female work in agriculture to be about 50%, however land is predominantly owned by males. Furthermore, a lot of women are employed in processing firms for very low wages (Personal communication, 7th October 2015). These issues show that women are very involved in agriculture, but disadvantaged when it comes to land rights and generated income.

Ethiopia

According to Tadele and Gella (2014) the agricultural sector is extremely gendered in Ethiopia as well. Men lead the business while women help their husbands, and next to working on the land they also need to take care of the children and carry out other domestic activities. Women in Ethiopia marry at an early age, often with men that are far older. The possibilities for females, in education and jobs, especially in the rural areas are few compared to the chances for men. Next to this, they have less access to social security and government intervention programs. The lower participation grade and less skilled jobs for women are the result of education, since female often follow less education than male (Broussar and Tekleselassie, 2012). Another gender related issue are the practices in many rural places of Ethiopia of early marriage and circumcision. The taboo on these topics, especially among their own communities makes the transition for female youth to adulthood increasingly difficult (Chuta and Crivello, 2013). One of the major fears of rural, but also urban young females is the fear of rape, or abduction in order to get married. The government launched a program together with NGO's against these 'harmful traditional practises' (HTP) (Chuta and Crivello, 2013).

Within agriculture, male and female roles are often different. Ploughing is not a woman's job, however she is better at saving money and selling the produce at the farmers market. On the other hand, men are often able to make more money and therefore often do the marketing part (Interviewee number 5, personal communication, 30th September 2015). However, women are also involved in agriculture, and therefore interviewee number 1 indicates that they need to be emphasized in agricultural projects, especially because they are often more vulnerable (Personal communication, 01-10-2015). This could neutralise the disadvantage they have a bit. This information shows that awareness of the specific cultural and traditional differences between men and women is needed in order to analyse equality in opportunities and rights. Often women have less rights on land and are expected to perform different functions compared to men, which could pose difficulties for them in establishing agricultural businesses. Furthermore, in project designs it is important to take this element into account in order to tailor them to the situation.

Conclusion

The way we defined youth in this chapter impacts the way organisations should deal with them. By defining youth as a social construct, we encourage organisations working with youth to move beyond the formal statistical definitions, as they are often used by governmental organisations like the African Union and the United Nations. The duty for organisations in the field is to look beyond the statistics and see who youth really are in the context of their society. In doing so organisations will get more grip on the "real" youth in their surroundings, as they will then know the specific characteristics and capabilities of youth and are better able to recognize them. This will enable organisations to fine-tune their programs and customize them better to youth. The characteristics of youth, like high mobility, active actors, easy transformability, and others need to be taken into account when looking at the involvement of youth. These characteristics will be elaborated on in the rest of the report, especially in the chapters on youth involvement and the discussion. Next to this we want to stress the role of gender as, although agriculture is often seen as a male sector, there are lots of opportunities for females. We encourage organisations while dealing with youth, to give specific attention to females.

Value chains

This report focuses on two value chains: maize and potato. The following chapter divides the value chains in production, as incorporated in farming systems, and post-production. It has been chosen to not only look at the isolated crop production, but to assess the farming system as a whole, because the different components of farming systems are interrelated and influencing each other. Therefore an holistic examination, that takes all the inputs (e.g. labour, fertilizers, seeds) needed and the structure of the household into consideration, is requested. The second part of the value chains, or post-production, will be analysed with respect to all the interactions between actors that take place at different steps of the chain (see figure 1).

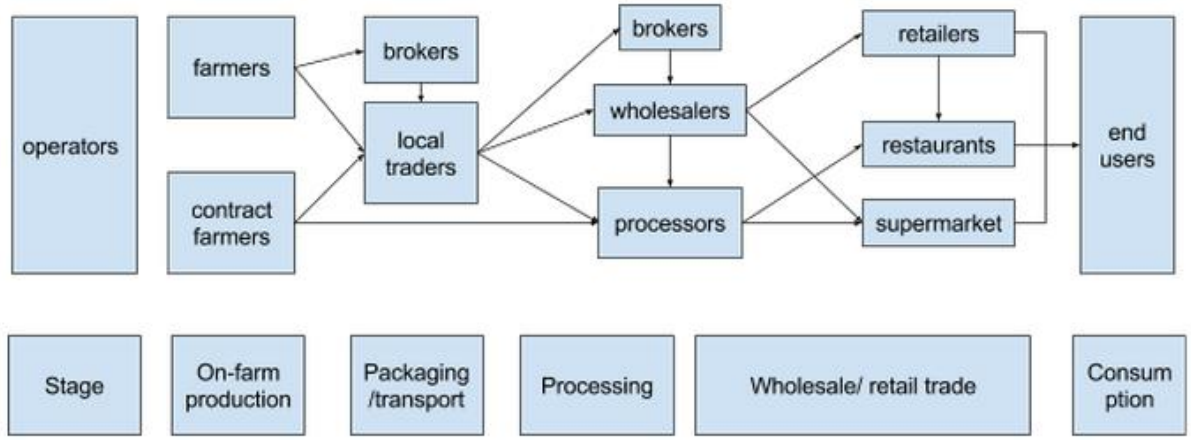

Figure 1 Graphical representation of a general value chain applicable for maize and potato in Kenya and Ethiopia *(Adapted from GIZ (2014) by the authors)*

Farming systems

In the maize and potato sector, we can distinguish two kinds of farms based on their size and their resource availability: smallholder and commercial farms. Mixed maize based farming systems, where maize is the main crop but also other crops and cattle are present, are one of the most represented agricultural production systems in the high- and middle-lands of Ethiopia and Kenya (Dixon et al., 2001). In East Africa, 75% of agricultural production and over 75% of employees are linked to smallholder farming (Salami et al 2010) and in Kenya 98% of the farm holding are small (less than 10 ha) Kamau, F. K. (2000).

Smallholder farmers cultivate generally less than 4.5 hectares of land (USAID-KAVES, 2014) and the average farm size of smallholders in Ethiopia is < 1 hectare (et al., 2012), while in Kenya it is <2 hectares (Dixon et al., 2001). Smallholders mainly use manual and animal labour, farmyard manure and home grown seeds and produce most of their agricultural inputs themselves. Commercial farmers, at the contrary, are more dependent on external actors as their production system depends on mineral fertilizer, certified seeds and machineries. Furthermore commercial farms are often more specialized in particular crops, while smallholders are often farming for subsistence, which results in higher crop diversities.

According to White (2012) studies of traditional rural practices show that some youth (males and females) were given land by their parents or other relatives to farm for themselves. Some other youths are engaged in paid work on the farms of relatives or parents. Youths on these farms are controlled by the parents or relatives to a greater or lesser extend on the product of their farm work and are not in charge themselves. Most small-scale farming is done by women, but they lack independence (white 2012), this is attributed to the fact that women do not own the land, it belongs to the family.

The farming system is composed of different elements that are interrelated and can be seen in Figure 2.

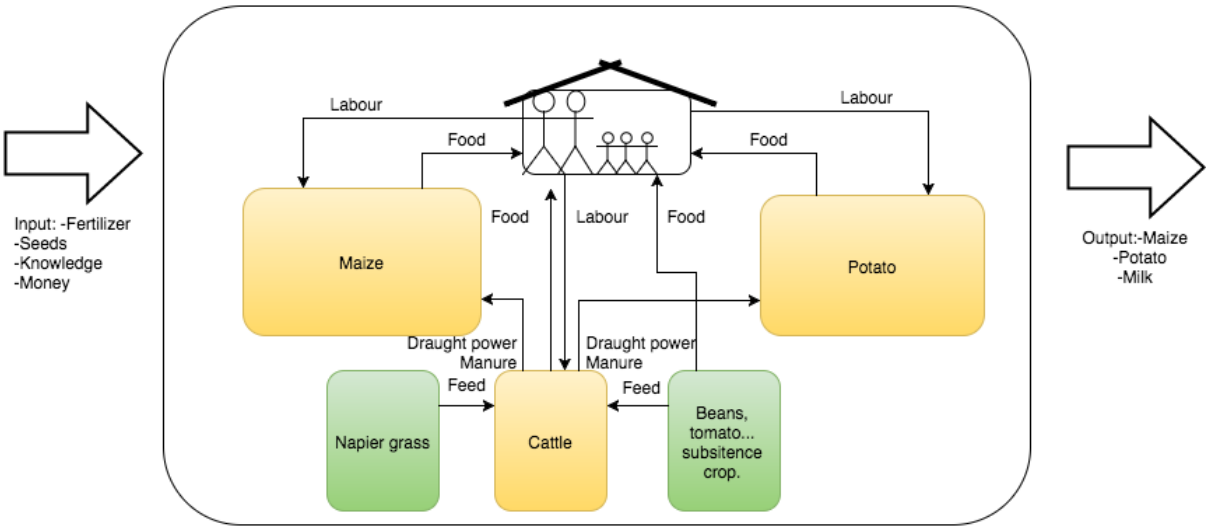

Figure 2 Simplified representation of a mixed maize based farming system, showing the relations between inputs, the household, crops, cattle and outputs. Constructed by authors.

Household

Farmers most of the times manage the production stage of the value chain, the household, and decide about the execution of crop production. According to Size (2003), on smallholder farms labour intensive work is left for women and youth. Moreover households, in both Kenya and Ethiopia, are usually composed of an average of 5 family members (Macro International Inc., 2007, Size 2003) and in Ethiopia about 20% of the rural households is headed by woman (Macro International Inc., 2007). Usually all family members are involved in farming, except one of the sons, who often works off-farm and sends money back for the family that uses it for school fees and clothes (Dixon et al., 2001).

Cattle

In Kenya, highland farmers with more intensive systems, generally have four cows per hectare of crop (Omore, n.d.). The main purpose of cattle is to provide draught animal power to cultivate land (Anderson, 1985), but also to obtain manure, meat and dairy products. Feed is produced both on farm as well as obtained from outside the farm in the form of common grazing and the purchase of concentrates (Thorne, 2002). In some farming system an area with pasture is set aside to feed cows. The manure produced is the main source of fertilizer for crops.

Crops

Legumes

Legumes are grown for home consumption and for feeding cattle in the dry period, when they are an even more important source of protein. In most tropical countries grain legumes are high value crops, usually commanding two to four times the price of maize and are marketed easily. (Rao and Mathuva 2000)Legumes play an important role in the functioning of the farm: they can improve soil structure, hamper weed growth and restore soil fertility via the fixing of nitrogen (Ojiem, 2006).

Maize

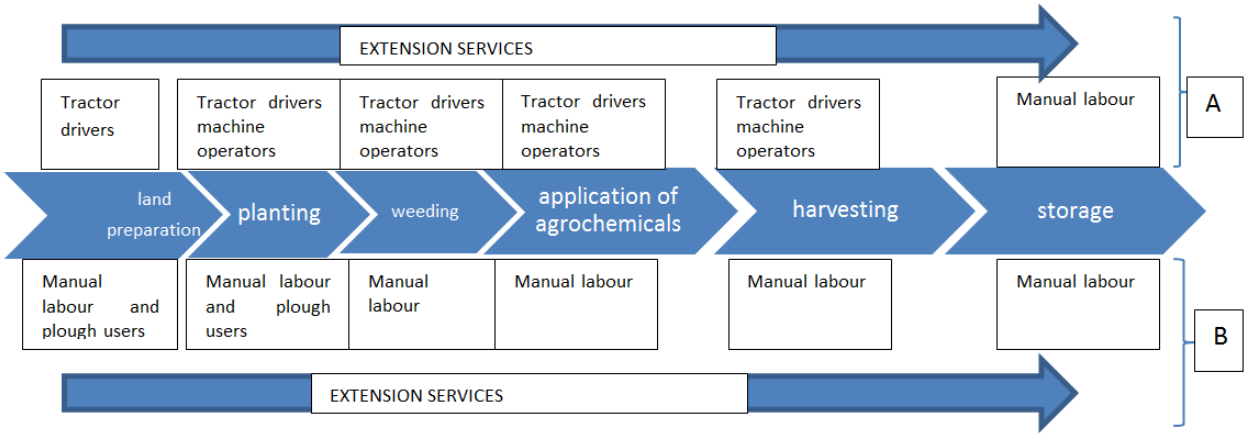

Figure 3 Different steps of maize production, A representing commercial farms, B representing smallholder farms. Constructed by authors.

Subsistence farmers grow maize, both as feed and food, on average on 30% of their farm. Extra produce is sold and provides income to the household (Thorne, 2002). In Kenya 90% of rural households grow maize and production is dominated by small scale farmers. They produce 75% of total production, while the other 25% is grown by large scale farmers (Kang'ethe, 2011). In Ethiopia about 8 million households were involved in maize production in the 2010/2011 season. Smallholder farmers account for 95% of the total Ethiopian production and only 5% is produced by commercial farmers (Demeke et al., 2012). In the 2011-2012 season, maize was grown on about 15% of the Ethiopian cultivated area, resulting in a total national production of 6.1 million tons (Minten et al., 2013). Main differences in the maize production process for small scale and commercial farmers are in the resources and tools/machineries available for each production stage and how many times the process is repeated. In Kenya the formation of co-operatives is not popular because of poor management and low member participation (Rashid et al., 2010).

Land is prepared by small scale farmers before the beginning of the rainy season, to remove weeds, loosen the soil and apply manure. Commercial farmers also include a number of other activities like ploughing and harrowing. Ideal time for planting can vary from March to May depending on the region and weather conditions. Maize seed is planted together with fertiliser to improve the germination and growth phase. In most farms weeding is done twice, 2-3 weeks and 6-8 weeks after germination. Small scale farmers use manual weeding and some commercial farmers use herbicides. After weeding, top dressing fertilizer and agrochemicals are applied to control and reduce pests and diseases presence: furthermore to restore soil structure and fertility farmers rotate their crops based on cereal-legume-horticulture-fallow (Anderson, 1985).

Depending on the variety, maize is harvested after 90-130 days and can be sold as fresh cobs. Most of the maize is, however, left to dry and then harvested as grain after which it is stored for consumption or sale. Maize stalks are used for mulch on the fields and as feed for livestock.

Potatoes

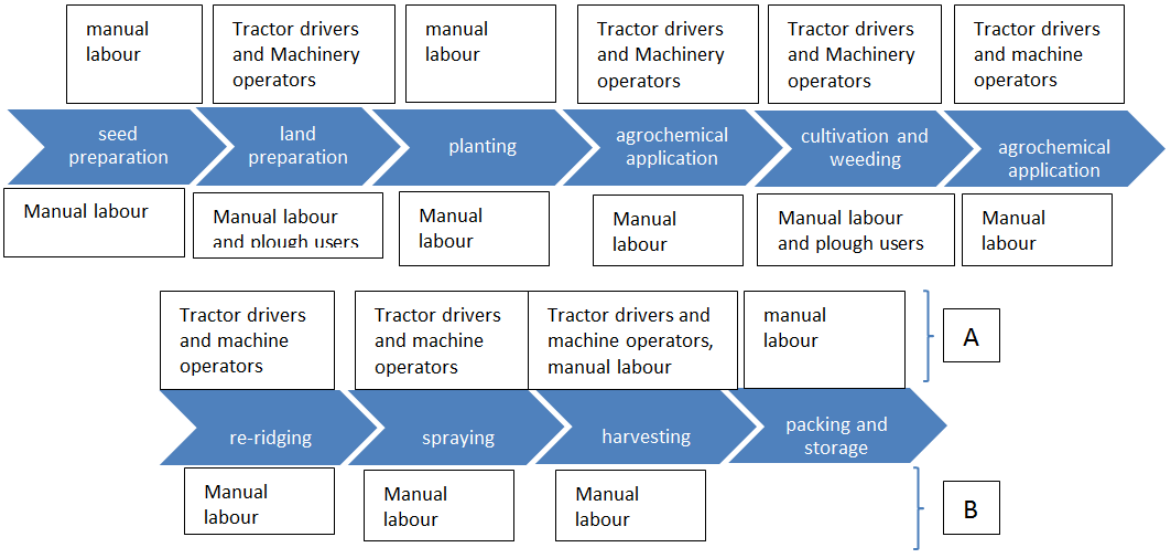

Figure 4 Graphical representation of the different steps in potato production. A represents commercial farms, B smallholder farms. Constructed by authors.

Potato seeds are prepared by letting them sprout in the dark. Land preparation is critical in potato production, because potatoes need loose soil and ridges to produce more tubers.

After land preparation, the sprouted potatoes are planted together with fertiliser in a row spacing of 75 cm and a plant distance of 30 cm (Chadha, 2001). In both smallholder and commercial farms planting is done with manual labour. Three weeks after planting, potatoes are "earthed up", then covered with soil, leaving less than 10 cm of above ground plant parts.

Weeding is done up to 6-8 weeks after crop emergence (Chadha, 2001). Farmers spray agrochemicals on regular intervals against bacterial wilt, early and late blight, viral diseases and pests. Depending on the variety and growing conditions potatoes are ready for harvest after 14-20 weeks. Sometimes potatoes are graded after which they are stored in a dark cool dry place.

Inputs

The main input suppliers can be categorised into 3 categories; public institutions, commercial channels and charitable organisations (Odame and Muange, 2011). Public institutions and charitable organisations mainly target smallholder farmers, while commercial channels sell to both small holder and commercial farmers, depending on their location.

Fertilizer

Fertilizer application in small and large scale farms in Kenya is lower than recommended rates, mainly due to high costs (GIZ, 2014). The mineral fertilizer usage is higher in Kenya, where they invest on average 100$/ha, than in Ethiopia where the investment is about 10$/ha. This results in lower potato productivity for Ethiopia.

As an example, in Kenya 45% of the farmers use manure on their potatoes compared to 26% in Ethiopia (Gildemacher et al., 2009). The cost of fertiliser is also a major challenge for maize growing. Some fertiliser suppliers are packaging smaller quantities to make it affordable for farmers (Freeman and Omiti 2003).

Seeds

Farmers obtain seeds from both formal (regulated by national and international regulations) and informal (locally produced or set aside from previous harvest) sources (Louwaars, 2007). The seed sector is dominated by farmers, as 77% of farmers use their own previous harvested seeds or those of the neighbours, while certified seeds account only for 5% of the national demand for potato seeds in Kenya (GIZ, 2014). Kenyan

farmers use both local and hybrid seeds for maize production, yields for both are about the same, because farmers do not apply sufficient nutrients for expressing the full seeds' potential (Odame, 2011).

Labour

85.4% of farmers use casual labour for harvesting their potatoes, while only 12% employ family members. These workers are often unskilled and are paid with low wages. Casual labour has the biggest share of job for youth it represents 40% of the total youth employment (Farm Concern International, 2015). Most of the family work is unpaid, which make family members less willing to work on the farm (GIZ, 2014). Regarding the youth involvement in agriculture, a study conducted by FAO ((a) 2014) showed that, for the sample interviewed, just 15% of the youth living in rural areas are involved actively in the farm work. This evidence is strengthened by the fact that the average age of farmers in Kenya is around 60 years old (Njeru and Gichimu, 2014).

Post production

This section focusses on the nodes of the value chain between the farm gate and the end consumer. As value chains for maize and potato in Kenya and Ethiopia have a lot of similarities, the chains will generally be discussed per crop with side nodes on specific country information.

Maize value chain

There are several actors involved in the maize value chain who will be discussed below. The main source of maize is domestic production, also because import is hardly viable due to high transportation costs (Woldegiorgis, 2011) and high import tariffs (Kirimi et al., 2011). There are few downstream buyers and only little processing activities (Rashid et al., 2010).

Market regulators

The National Cereals and Produce Board of Kenya (NCPB) is an organization supported by the Kenyan government, that regulates the cereals market by providing storage and purchasing possibilities (Kang'ethe 2011). It gets particularly involved when yields are good, to prevent price drops. It buys 15% of the total maize production (Short et al., 2012) and has, as only actor, modern and efficient storage warehouses available. NCPB gives farmers the possibility to rent storage space and use services for fumigation, drying and bagging (Kirimi et al., 2011). In Ethiopia the state owned Ethiopian Grain Trade Enterprise (EGTE) is involved with price stabilization through ad hoc interventions, which lead to insecurities among chain actors (Woldegiorgis, 2011).

Victone Onyango, Kenya

Victone Onyango is the first child in a family of eight. He has got a college degree, having studied commerce and accountancy. Currently, he is C.E.O. of Inuka Success Youth Group, working with other youth on issues to do with agribusiness, education and climate change. He wants to help other youth looking at ways to add value to their production. By adding value agriculture could become more interesting and youth might become more interested then. This way they do not all desire white collared jobs in the city anymore.

Traders

Traders are at the start of the post-production value chain and step in after harvest. From a small communal survey in Ethiopia it became clear that of the male headed households 13.3% was a trader as primary occupation and 26.7% as secondary occupation. For female headed households these numbers were 6.7 and 0% respectively (Howard and Smith, 2006). Traders need a good network to connect to local producers maize from small scale farmers, adapt the volume and sell to larger buyers like wholesalers (Rashid et al., 2010). The main limitation for traders is working capital as this constraints their purchase quantity and product storage (Kirimi et al., 2011). Traders benefit from the limited price information farmers have, meaning they can offer lower than fair prices (Woldegiorgis, 2011).

Assemblers fall within the group of traders. Local assemblers are farmers who use revenues from their agricultural activity to buy more maize and accumulate it to store it temporarily to wait for better prices. External assemblers cover a larger area if compared to local assemblers, through external assembler the most isolated farmers, difficult to reach, are able to introduce their product into the value chain too. Both types of assemblers use donkeys, bicycles and trucks to transport maize (Kirimi et al., 2011; Woldegiorgis, 2011).

Brokers

Brokers typically sell grain for regional merchants, provide market information, collect and return grain sacks, identify buyers, provide temporary storage, collect bills and arrange transport in exchange for a commission (Woldegiorgis, 2011). Their role is to connect smallholders to large scale wholesalers without any need of storage in between. Thanks to brokers, wholesalers are able to lower transaction costs (Kang'ethe 2011).

Wholesalers

Wholesalers operate mostly in cities and use their own or rented trucks to purchase maize through brokers, assemblers or directly from farmers. They funnel produce from a wide geographic area into cities markets. They are not limited to specific areas, but link the offer from productive areas to the demand of deficit regions. The most important Kenyan wholesale market is the Nyamakina market located in Nairobi (Kirimi et al., 2011). Wholesalers sell the produce to retailers or directly to consumers from their trucks. In the latter case there are no intermediates, which means lower risks and higher profit margins. In Ethiopia all wholesalers together handle >70% of all maize traded (Woldegiorgis, 2011).

Direct selling to milling companies can, however, be hard because of high quality requirements that are difficult to satisfy and the general corruption that prolongs the trade, thus the cost opportunity of the transaction. To overcome these barriers brokers are often deployed. Almost half of the wholesalers own storage facilities, the other half rents them. Most wholesalers, however, are hesitant to store maize, due to risks of storage losses and price fluctuations. A period as short as possible between buying and selling is thus preferred (Kirimi et al., 2011).

Processors (Millers)

Both large scale- and small scale millers are present. In Kenya just four companies cover almost 80% of all sifted maize production. Most of the sifted maize is bought at the mill gate to ensure quality, thus avoiding processing problems. Most milling companies are dependent on the NCPB for storage and meeting demand after their stock is finished (Kirimi et al., 2011). In 2008 there were 65 large mills in Ethiopia, that altogether processed about 30% of all marketed grain (Woldegiorgis, 2011).

Small mills are minor actors in the buying and selling of maize. Rural households bring their produce there and pay a processing fee (Woldegiorgis, 2011). During harvest periods millers assemble maize for wholesalers too. Millers rarely have their own stock and most of the time only offers milling service to customers. In Kenya these so called 'posho' mills are facing a growing trend, at the moment they handle almost 60% of all the maize meal processed. (Kang'ethe 2011). A small local survey in Ethiopia showed that of the male headed households only 6.7% was involved in grain milling as secondary occupation while for the female headed households 6.7% was involved in it as primary occupation and 33.3% as secondary occupation (Howard and Smith, 2006).

Jomo Eddy Coly, Kenya

Jomo Eddy Coly is a 26 year old Kenyan works in poultry farming, especially with cooperative societies. He has first done an internship with the International Labour Organisation, in which he focused on poultry. Afterwards he did market research, and found out there was a niche in which he could supply poultry directly to restaurants. So now he supplies them poultry. Another part of his company is selling chicks to other farmers, in which he also provides after sales assistance. He feels that stories like his, having a successful agricultural company, will encourage other youth to also go into agriculture or start an agricultural business.

Retailers

Retailers divide the ware in smaller quantities to satisfy customer demand. They source grain from wholesalers, clean and sell to end consumers. Retailers have little or no storage and mostly face problems like inconsistent supply and price volatility. Furthermore it is hard to connect the small number of large buyers with the large number of small retailers (Rashid et al., 2010).

Consumers

Consumers are mostly reached through retailers. Among these, in Kenya, the most important are duka shops, which are small retail shops, kiosks, open markets, posho mills, and large and small supermarkets. The utilization of these channels depends on social status and income of the customers. Duka shops are mostly

used when income is low while supermarkets become more popular when income is higher (Kirimi et al., 2011). In Ethiopia maize is a major staple food in the lowlands, however, in the urban areas maize is only minimally consumed (Berhane et al., 2011).

Through the whole maize value chain several constraints can be found, of which the most important are: small trading units, no year-round supply, lack of working capital, lack of trust in co-operatives, bad infrastructure and no or bad quality control (Rashid et al., 2010).

Potato value chain

For the examination of the potato chain we will solely look at consumption (or ware) potatoes. Kenya and Ethiopia are in the top ten African countries with respect to the largest area of potato cropping (Byerlee et al., 2007). Potatoes are both used as a staple food and as a source of cash. There are hardly any other options than selling potatoes for the fresh market (Gildemacher et al. (a), 2009) and the major outlets are the farm gate and the local- and central market (Abebe et al., 2010). Between farmers and consumers many different actors intermediate, which are specified below. Only a small percentage of producers do not follow these steps. For example contract farmers manage 9% of total potato produce in Kenya and sell directly to the processing industry (Hoeffler, 2006).

Every year almost 1.5 million tonnes of potatoes are allocated to the market in Kenya. Moreover the yearly consumption per capita is 30 Kg and it is expected to increase. The whole potato value chain provides work to almost 3.3 million people, with 800.000 people involved in production and 2,5 million people working in downstream passages (Abong, 2013).

Traders

Traders set potato prices dependent on the availability of produce that fluctuates per season (Emana and Nigussie, 2011). Moreover their earnings depend on volumes traded with commission earnings of €0.35-0.40 per bag (GIZ, 2014).

Brokers

Brokers link farmers with traders, wholesalers with wholesalers and wholesalers with retailers (Emana and Nigussie, 2011). There are basically 3 types of brokers; field brokers that operate at the farm field level, local market brokers, and commission agents that operate at the central markets, which also inform traders on prices (Abebe et al., 2010). These 'middle men' take advantage of the fact that farmers are often not informed on market prices and push prices high to wholesalers (Haverkort et al., 2012). Brokers are organized in groups and are paid a fixed fee per bag traded. Their role is considered one of the hardest among the whole value chain because of the high physical effort required and the difficult working conditions; therefore most of them are male (GIZ, 2014).

Depending on the weather and the resources available, brokers transport potatoes from the field to the road using tractors or donkeys. Because of the lack of adequate infrastructure, brokers face many transport difficulties, which may cause delays and quality deteriorations. In this case brokers bear the risk and bad produce is not transferred to traders, as they will not buy spoilt stock (GIZ, 2014).

Wholesalers

Wholesalers are in charge of transporting potatoes from the main production areas to the markets. Thanks to the information they have about potato supply, marketing channels and markets they can set prices and, assisted by brokers, regulate the chain. In Kenya, for example, transport distances range between 15 and 500 km (Mombasa). However most of the wholesalers travel an average of 300 km. In Kenya the most important market is the Wakulima Market in Nairobi. It has been estimated that more than 50% of all potatoes traded pass through this market. From there on potatoes are transferred to other city markets or counties (GIZ, 2014).

In Kenya 12% of wholesalers are women and 66.4% of male, against the 59% of women, wholesalers and retailers have an higher education certificate (GIZ, 2014). Regarding Ethiopia, there are about 70 potato wholesalers at the biggest wholesale market of Addis Ababa. They all sell about 4-7 tons a day and their main

customers are retailers and individual household consumers. They source their potatoes from farmers and pay about €790 for 7 ton (Haverkort et al., 2012).

Processing

In Kenya most of the potatoes produced are destined to markets, retail shops and supermarkets. According to the National Potato Council of Kenya only 9% of the potatoes produced are processed (french fries and crisps). This number, however, is increasing as the urban population is growing, food habits are changing, incomes are rising and tourism is increasing. Next to problems with immature, rotten and damaged potatoes, processing companies experience difficulties with under and oversized potatoes, as they are not suitable for their machinery. This leads to more labour requirements and additional costs. As processors rarely store potatoes they also face potato shortages (GIZ, 2014).

Seife Bogale, Ethiopia

Seife Bogale is a 30 year old Ethiopian farm manager working in the flower industry. He has studied horticulture, for the simple reason that the government randomly assigned this programme to him. He has been working in horticulture already for eight years now, and indicates that it is an interesting sector for youth. It drives them away from traditional crops and small-scale farming, which they often look down upon. Additionally, they are often more interested in horticulture, because is less demanding and tough work. Employment and contracts are available in the horticultural sector and its businesses, according to Seife.

In Ethiopia there exist broadly 4 categories of potatoes: fresh potatoes for the supermarket (graded, washed, sorted, packed, branded), boiled or fried potatoes at home, chips at restaurants or frozen in supermarkets, and crisps that are locally made or imported (Haverkort et al., 2012). Large scale potato processing does not exist (yet), but it is common for hotels, restaurants and café's to make their own French fries, as well as street vendors do. Only small scale chips making and potato cooking is present. Some supermarkets are preparing chips themselves due to lack of processing industry (Emana and Nigussie, 2011).

Retailers

Retailers are the last link between producers and consumers. They mostly buy from wholesalers and sell to urban consumers. Only in rare cases they buy from farmers directly (Emana and Nigussie, 2011). In Kenya the majority of retailers are female (70.4%) and almost 60% of female retailers and wholesalers have completed secondary school or college (GIZ, 2014). Retailers suffer from irregular potato supply, both in quantity and quality, also because there are no standards present to determine potato quality (Gildemacher et al. (a), 2009). Along the chain there are not many quality controls and bags are opened only to divide the stock in smaller packages. Even though damages are expected, quality is not considered that relevant to justify quality controls and its additional costs. Therefore damages that occur at the farm level are transferred unto retailers. Retailers open bags and divide the potatoes according to external qualities (cuts and size). Potatoes with an insufficient level are sold for lower prices (GIZ, 2014).

Supermarkets

Supermarkets in Kenya are not the most important channels for potato selling, because they sell at higher prices and freshness is perceived lower compared to open markets. Only 1% of total potato sales happens via supermarkets, that are usually supplied weekly. The biggest difference with products directed to open markets is quality control. Supermarkets use refrigerated facilities for their distribution. Furthermore also a reverse flow of goods is present that allows restitution of green, rotten or damaged tubers. Supermarkets experience very few losses, because average quality is better resulting in longer shelf life. Selling volume is lower compared to open markets and storage losses are almost nihil as potatoes are only stored for short time periods (GIZ, 2014).

Consumers

About 4 types of potato consumers can be identified which are households, restaurants, cafés and institutions that provide services (Emana and Nigussie, 2011). Restaurants are the most important selling points for potatoes consumed in Kenyan cities. Potatoes are used for popular dishes like chips, banjia and mash. Potato demand is increasing, because of the growing popularity of fast food among youth. Restaurants are mostly supplied two-three times per week by wholesale- and retail markets. Only a small percentage is supplied through contract farming (GIZ., 2014).

When looking at the potato value chain in general it can be seen that inadequate storage and poor handling and transport facilities lead to losses and damages (Emana and Nigussie, 2011). Furthermore especially irregular supply, both in quantity and quality, as well as poor information flow due to weak linkages between actors, are major constraints (Gildemacher et al. (a, b), 2009).

Youth as service providers

Although information on the involvement of youth in the maize and potato value chain is hard to find, there are examples about youth involvement in the broader agricultural value chain present where they have the role of service providers, which are presented below. These examples from Kenya and Ethiopia show how youth can be involved and what already has been done to integrate them. Although we assume that these examples are also applicable to the maize and potato value chains, this cannot be stated because there is no specific literature available. Later in this report we will elaborate more on the push and pull conditions for youth involvement. Nevertheless these examples can give relevant insights.

Kenya
According to Rees et al. (2000) youth are particularly interested in short-term cash enterprises and less in the reduction of production costs and/or resource conservation. This resulted in the fact that some youth buy agricultural produce in rural areas and sell it in urban areas. On their way back they bring seeds and agro-chemicals to sell in the rural areas. In Kenya most youth work together in groups or clubs to aggregate resources and increase access to loans to establish their own enterprises.

Some youth groups are operating dip tanks that are abandoned by the government to treat cows against pests and diseases on a commercial basis (Rees et al 2000). In some cases private veterinarians are asked to give support to farmers who come to these dip tanks, and offer extension and advisory services. These enterprises are attractive for youth because they are profitable. Besides money, these dip tanks can help to improve the health of local animals and increase knowledge on animal husbandry practices. Such enterprises also receiving support through governmental and non-governmental trainings in entrepreneurship education (Nafukho 1998).

Ethiopia
In Ethiopia in 2012, more than 22000 agricultural young extension officers, of which 3000 were females, had been educated to provide training and extension to farmers (NEPAD 2013). These are not self-employed but work for the government as development agents. Most trained extension workers are involved in providing their services to farmers through the public sector.

The training institutions are also involved in offering training for micro- and small enterprises in rural areas. However the number of youth involved in the setting up of small enterprises is limited. According to Bennell (2007) the biggest challenge is that nearly three quarters of 15-24 year olds have no schooling thus they are forced into being employees rather than employers.

Despite these challenges the government, together with developmental organisations, is working to increase the involvement of youth in the agricultural value chain. In an effort to make agriculture more profitable development of new specialised services is required, that would offer opportunities for youth to enter into the value chain as services providers.

Conclusion

In this chapter we assessed the components of the farming systems and value chains. Seeing as they are two separate constructs, we elaborated on both and covered every step and element of them. This way it becomes visible which steps there are and therefore where youth could get involved. However lack of data and indirectly lack of attention cause us not to be able to analyse youth involvement in these steps. This was especially the case for the post-production stages, where less literature on youth was available compared to the production stage. In the chapter on youth involvement there will be looked into some of these parts based on the data from the interviews. However in all of these steps of the value chains and also in the farming systems youth could be involved, and it could be argued that they are. Additional research is thus needed on youth involvement in the maize and potato value chains to identify at which nodes youth is, or could be, present.

Youth involvement in the agricultural value chain

Introduction

In the previous chapters we looked at the social construct of youth and what the farming systems and value chains of maize and potato look like in Ethiopia and Kenya. In this chapter we specifically look at the connection of both concepts, the way youth is involved in agriculture and the push and pull factors that influence youth involvement. The involvement of youth is focused on the general agricultural value chain and not specifically on those of maize and potato. The reason for this is that there were little experts available on maize and potato value chains that had experience with youth. Another remark is that most of the experts focused on the production phase of the value chain (farming systems) when they spoke about youth involvement and had less information available on the post-production phase. This means that the post-production phase gets less attention in this chapter compared to the production phase. We propose more research to be done on the post-production phase of the value chain and youth involvement therein.

Since the main focus of our project is the involvement of youth, we chose to interview 10 experts from organisations in Ethiopia and Kenya who have experience with youth, and preferably also have experience in the field of agricultural value chains. It is chosen to interview experts, because the time scale of the project and the difficulty of finding youth to interview did not allow a representative sample of youth to be interviewed, while experts are able to provide information on groups of youth at once. In the tables below, the key answers of our experts on conditions that attract youth or push them away from agriculture are visualized. The conditions are hierarchically ordered, based on the frequency with which they were mentioned by experts. In this chapter the content of the tables is analysed and linked to existing literature on these topics. For each condition, it is mentioned why it is important to take into consideration when looking at the involvement of youth in the agricultural value chain.

Table 4 Results from the expert interviews of Ethiopia

	Ethiopia				
Interviewee no.	1	2	3	4	5
Push condition					
Perception and Aspirations	Motivation is needed	Youth do not want to be involved in agriculture	Move away for employment	For youth urban areas are better	Negative perception of agriculture, prefer city work
Finance	Startup capital difficulties	The initial capital is important. Credit is available, but not enough.	Access to financial capital	Access to finance	Finance is the main problem, price fluctuations, increase risks
Low income	Youth is more focused on economic factors		No economic basis for agriculture, people cannot make a living	Low income	Youth like to earn a lot of money in short time
Land	Need capital to obtain land	Land availability difficulties	If interested youth can access land	Lack of access to land	All land is owned by the government
Infrastructure/ access to market	Infrastructure, transportation, and training		Sometimes only access to traders who ask unfair prices	Cities have better facilities	Cities have better services and infrastructure
Education	Capacity building needed	Shortage of skills		Develop entrepreneurial thinking	
Policies	Link youth to government and other organisations for support	Policies do consider agriculture, but not youth much			
Others		There is a shortage of skill and knowledge	Mechanisation is low	Can't see a future in agriculture, missing skills on practical aspects	
Pull condition					
Community support	Family support			Need of support by stakeholders For input and knowledge	Parents do not support children To work in agriculture
Use of ICT		Youth use ICT	Internet and telephone networks lead to more openness		
Others	Skills training		Create farmer groups, cooperation, which together make use of resources		

Table 5 Results from interviews of Kenya

	Kenya				
	James Kamotho	Joel Otieno Otiang	Douglas Onyango	Michael Asudi	Yvonne Omwodo
Push condition					
Land	Land scarcity especially Highlands +Nairobi Land reform act needed	No good access to land	They do not own their own land, work with their parents	Land ownership, land belongs to parents, only possible access is through inheritance	Difficulty to get land
Perception and Aspirations	Agriculture is last resort		Working in agriculture is for old people. Youth prefer cities	Few prefer working in agriculture	Agriculture is last thing if you don't have a job
Infrastructure/ Access to market		Lack of marketing leads to low price. Lots of maize but nobody to buy it		Urban migration, no infrastructure in rural area	Infrastructure; no to access the market
Finance	Grains are for bigger farmers, capital intensive. Giving loans and other incentives		Youth don't have the necessary starting capital	No economic support and farming is expensive, finance is lacking for the need of equipment	
Education		Training first		colonial education system - office jobs	Education key - agricultural courses from primary school on
Low income	Poor performing economy	Very little rewards; no patience to invest; bad farming conditions			Lack of positive economic perspective, cannot make money
Policies	Involve politics		Policies and Governance influences youth participation		
Others	Hard work		Complicated and long procedures to borrow money	Lack of awareness	
Pull condition					
Community support	Media makes agriculture attractive				To show them opportunities
Use of ICT	New communication makes knowledge available				Keep agriculture integrated in education

According to an article by FAO ((a) 2014), youth have a somewhat deviating viewpoint on the agricultural value chain. For instance, transportation is not viewed by them as part of the value chain. As said, not much research has been done on youth involvement in other parts of the agricultural value chain apart from production. However, according to Dolan and Sutherland (2002), in Kenya a lot of youth, especially males, obtain jobs in the processing part of horticultural value chains, which includes potatoes. These jobs are easier to obtain and do not require input of capital. After receiving some money herein, they often return home to buy a small plot of land to start up their own agricultural business. Furthermore, according to Afande, Maina and Maina (2015), youth often prefer employment with good communication infrastructure, which could indicate the types of jobs youth prefer within the agricultural value chain. In the following we will firstly provide a definition of involvement, after which we will discuss the main conditions derived from literature and interviews, according to the level of indication.

Definition involvement:

The Centre of Excellence for youth involvement defines youth involvement as: "a meaningful and sustained participation in an activity with a focus outside the self"(Leonard, 2004 p.3 in Afande, Maina and Maina, 2014). In this case, it is about sustained employment within a part of the agricultural value chain, thus for a longer period of time.

Youth as a category is often excluded from policies related to agricultural development and therefore become marginalised (Afande, Maina and Maina, 2015). This is because most policies are directed towards existing farmers, however the observation that a generation gap is emerging is only recently starting to get recognised by governments. New policies and governmental research directed more towards youth are starting to take shape in Kenya, according to Yvonne Omwodo (personal communication, 7 October 2015), and in Ethiopia, according to interviewee number 1 (personal communication, 1 October 2015). This current policy gap regarding youth causes them to become vulnerable, falling outside support regulations, suffering frequently from unemployment, underemployment, and poverty (FAO,(a), 2014). On the other hand, youth is identified to be extremely resilient and resourceful, a useful combination when starting an agricultural business (Afande, Maina and Maina, 2015). Additionally, they are more open towards new practices, which are needed to ensure increased production and food security in the future.

Alphaxard Gitau, Kenya

Alphaxard Gitau is a young farmer of 24 years living in Kenya. He is an entrepreneur in dairy and poultry products, supplying to various outlets. He has studied economics, and is very passionate about his work. According to him, agriculture needs to be 'monetised'. Youth does not see that you can actually make a lot of money from agriculture, through for instance mechanisation and ICT. His friends work often in offices or have started up different activities, but he likes to work for himself. He feels that it needs to be shown that agriculture actually can make a lot of money, then others would stop seeing it as a backwards profession and become interested in the sector.

Important conditions

From the interviews, six conditions that influence youth have been derived which were mentioned most frequently and stressed. They were elaborated on most by the interviewees. Furthermore, these conditions are also reflected in literature. Therefore we will discuss these below, using both literature and interviews to analyse them thoroughly. The discussion and the conclusions we draw are based on the conditions which are retrieved from the interviews and are presented in the tables 4 and 5. These conditions will be discussed in the order in which they were referred to most frequently by the experts.

Land

Kenya

The most important and most often mentioned condition in the table (see tables 4 and 5) is the access to land. All Kenyan experts mentioned this as a push condition, which results in decreased interest of youth in agriculture. Different factors related to land are mentioned. One of the major problems is the scarcity of land,

especially in the highlands, as said by James Kamotho (see table 5) . Next to scarcity, a factor is the difficulty of land ownership. Joel Otieno Otiang, Douglas Onyango and Yvonne Omwodo all mention that for youth it is difficult to access land, and to own it (see table 5). Land can in most of the cases in Kenya only be obtained through inheritance, which means that youth is not able to get a piece of land while their parents are still alive, as it is mentioned by Michael Asudi (see table 5). Furthermore, inheritance is often only for the sons and not for the daughters. Women have only recently obtained the legal right to inherit land, however culturally this is not yet a much accepted habit (FAO, 2004). Therefore women often perceive agriculture as an uncertain profession, because they have to rent land, which they often cannot afford to do, and because the land can, since it is rented, be taken back any time by the owner. Furthermore, even when being married and owning land, women prefer to work in a non-agricultural job because if being forced to work on their husbands farm they are afraid to have no access to the revenues. This all shows an absence of appropriate institutions protecting women and their rights to land and its revenues. Would their rights be more secure, they would be able to obtain land, invest in it and receive the revenues without uncertainty (FAO, (a), 2014).

Ethiopia

Ethiopia has recently seen increasing land scarcity, particularly in the more fertile highlands. The Ethiopian government has provided every citizen the right to land, however because of scarcity, they have also increased land security through a recent land registration reform. This, because previously land owned by someone could be subdivided to give a part of it to someone in need of land. This indicates a contradiction in laws, making it difficult for youth to obtain land, seeing as it is illegal in Ethiopia to buy land (Bezu and Holden, 2014). The best way for youth to obtain land is through inheritance, however because parents often have more than one child, this means land is divided every time it is inherited. This causes plots to become small, sometimes even too small to provide enough household income (Bezu and Holden, 2014). Furthermore, also in this case, it is the men who inherit the land, while women are left out of the inheritance arrangements. As seen in table 4 above, most interviews highlighted land access difficulties in Ethiopia as well. 4 out of 5 experts mention the difficulty to get land because of a lack of availability, or the fact that according to one of them, all the land is owned by the government (see table 4). They obtain it either through inheritance or from the government. There was one contradiction, however, interviewee number 3 from Ethiopia clearly stipulated that this problem is exaggerated. Youth is able to get land, according to him, it is often the responsibility of communities to give it to them. However in general, experts indicate it to be quite difficult to obtain land for youth, whether it is from a community or a government. (Interviewee number 3, personal communication, 06-10-2015).

Conclusion

Conditions related to land ownership and access are difficult to influence, since they are strongly rooted in culture, tradition and laws. It needs be investigated what organisations or politics can do in order to lower the existing thresholds to land accession. If land is not, or only in small amounts, available and it is difficult to change this situation, the focus could be shifted to the postproduction parts of the value chain. This means that investigation is necessary to look how and where youth can be involved in parts of the value chain where land is not such a strong a condition.

Perception and aspirations

In both countries a lack of interest in the agricultural sector is the most mentioned concern of the experts, presented in the row on 'Perceptions and Aspirations' in the tables 4 and 5. The aspirations of most young Kenyans and Ethiopians are not in the agricultural sector; they prefer fast money in office jobs. The low status of agriculture affect their choices as well, "it is the last thing if you don't have a job" (Yvonne Omwodo, see table 5). Leavy and Smith (2010) talk of the African presupposition which according to them enhance the characteristic of Africans to be "prestige conscious and keen to occupy positions which will gain them respect in their societies as well as aspiring to the very high standard of living enjoyed by the privileged elite" (2010, p.7).

The low status and the low socio-economic position that rural people have in Ethiopia and Kenya have a negative impact on their aspirations. Agriculture is considered as employment for the poor and the old, which is also mentioned by our experts (see tables 4 and 5). Because of the increasing visibility of status due to improving communications infrastructure, this profession is not considered to provide the lifestyle youth

aspires to obtain and display (Afande, Maina and Maina, 2015). A lack of trust is also influencing the choices of youth. They do not want to be dependent on others for their farming. This is also why they can be hesitant to start up cooperations of farmers, since than you are dependent on the qualities of others. The positive part of cooperatives is that you can get easier credit from the banks when the business plan is accepted (Interviewee number 5, personal communication, 30th September 2015). According to Tadele and Gella (2014), in Ethiopia a lot of youth mention that they did not want to become farmer and that it never was their first option. They became farmer because they did not have another option. This is also what can be seen in the tables, twice is mentioned that agriculture is the last resort of youth. The invisibility of the possibilities of youth involvement in the value chain can be a cause for the lack of aspirations and perception on involvement in other phases than the production or farming phase of the value chain.

Conclusion
The lack of interest, low status and aspirations of youth is one of the biggest influencers of the choices of youth to be involved in agriculture. Interests, aspirations are difficult to grasp, and therefore difficult to influence. Nevertheless, interventions can be done in order influence the perception of youth. This can for example be done by media campaigns in which the positive sides of agribusiness are stressed. A remark is that in the interviews the dominant focus was, when talking about aspiration and perception, on the production phase of the value chain, and not on the steps after. Also in the literature it was hard to find data about the (potential) involvement of youth as traders, brokers, retailers, etc.

Finance

The lack of starting capital (see tables 4 and 5), which is necessary in order to start a farm, is another factor that discourages youth to work in the agricultural sector. Farming is regarded as a relatively expensive business, and capital is needed to get access to farmland and equipment. Additionally, starting a business in the post-production parts of the value chain also require reasonable amounts of capital, as can be seen in the previous chapter. This lack of available capital in postproduction phases of the value chain also hinders youth. an van de Haar (Ethiopia) indicated that most capital (like microcredits) is available for smallholder farmers, to start a farm or to improve their production, while the capital available to invest in trading or processing is limited (Interviewee number 3, personal communication, 6 October 2015).

There is a division in the type of farms, which are attractive for youth, which is related to finance. The bigger farms, which often produce cereals, maize and potatoes are too expensive for youth (FAO (a), 2014). These larger farms are also too capital intensive for youth, according to James Kamotho (see table 5). Youth, as it came out of the interviews with the experts, often opt for the horticultural or poultry agribusiness, growing cash crops like strawberries or tomatoes. These crops require less land and equipment, and make more money per bushel. Lack of possibilities to get loans is problematic according to most of the experts that talked about financial issues. According to the working paper by FAO ((a) 2014), Kenyan youth often do not know how to access resources other than land. They do not know how to obtain loans without it being from a village moneylender, who operates with interest rates going as high as 50%. Microfinance or group lending schemes are sometimes available, especially for women, according to interviewee number 1 (Personal communication, 1 October 2015). Women often are more reliable with regard to paying back loans. However there is a need for tailored lending schemes focused on youth and gender specifically (FAO (a), 2014). To start up a business youth recognise the importance of capital, it is a big challenge is to set up business, especially in the postproduction phase of the value chain. The available loans from governments and banks are little. So both availability of capital, and the knowledge how and where to get it, are factors that hinder the involvement of youth in agriculture.

Conclusion
Finance is a condition that affects youth in all parts of the value chain, although most in the postproduction phase. In all cases the required financial capital is difficult for youth to acquire. New ways of finance, new ventures and methods herein are important for youth to obtain access to this resource. This should be focused on all parts of the value chain.

Infrastructure and market access

Experts mention the lack of access to markets (see tables 4 and 5), or even the absence of markets as a push condition for youth. This is especially the case for the rural areas, for which the absence of good infrastructure hinders the access to the markets, as it is also described in the previous chapter on the value chains. Afande, Maina and Maina (p.8, 2015) state: "Availability of good roads, constant electricity, recreational facilities, internet, potable water, affordable housing and qualitative healthcare in rural areas will go a long way in retaining youths in rural areas and improve their engagement with agriculture." This shows that good infrastructure provides a strong condition for youth to keep to agriculture and not move to the city in search of a more modern lifestyle as is mentioned by at least three respondents which is shown in the tables 4 and 5. As mentioned earlier in this report, youth are regarded as being very mobile, moving easily back and forth between cities and their rural home communities. The positive point is that youth can more easily find a job at different parts of the value chain since through increased mobility they are not forced to go into to farming (production) business, nevertheless increased mobility also means that youth can go to the urban areas more easily to find white collar jobs.

Marleen Brouwer indicated that communications and physical infrastructure are increasing and improving, however still large rural areas are excluded from the improvements and keep being increasingly isolated from the world (personal communication, 30-09-2015). For organisations, it is important to also look at these regions, and try to include them in their interventions.

The lack of markets, or access to markets can have the result that the farmers cannot get a fair price, but are dependent on the traders who need to take their goods to the markets. This is especially the case for women, since they are often not considered fit to drive motorbikes; they have more difficulties accessing markets (FAO (a), 2014). This dependency on traders leads to low prices for the farmers as it has been mentioned in the previous value chain analysis, which is confirmed by the Kenyan expert Joel Otieno Otiang (see table 5). Interviewee number 3 in Ethiopia also states that the bad connections with the markets make farmers dependent on the power of traders (see table 4). Youth often want to be connected to the markets on which they can make money. This leads to an increase in investment in non-traditional products, which link them new markets or even to the global market. This does mean that there is a decrease in the interest from youth in the traditional crops and local markets (Dolan and Sutherland, 2002).

Fred, Kenya

Fred, 24 years old, has together with his two associates a processing company for horticultural products. These products are processed for consumption purposes, mostly herbs for cooking. He gets a modest income out of it, mostly because they have just started the company. He has left his office job to work for the company full-time, and forecasts it making more money in the future, especially when the company grows and takes on more young employees. According to him there are several organisations that can help establish an agricultural company, however the most difficult thing for him was the money they needed to register their company. There is a lot of bureaucracy, which makes it very difficult, and in the end they even needed to hire a lawyer to help them.

Conclusion

A characteristic of youth is that they want to be connected. Connection is important on communicational level but also in relation to infrastructure. Connection to markets is for youth the only way to make money out of agriculture. According to the experts, as long as these conditions do not improve in the rural areas, they will move to the cities. The development of markets also means that they enlarge the possibilities to sell their products, and are not left with crops that cannot be sold. So, connection is not only relevant for the production phase but does emphasize the importance to consider the whole value chain.

Income

Experts indicate income is an important condition for youth to decide on a profession (See tables 4 and 5). Youth often feel that agriculture will not provide them the income they desire, that fits their lifestyle aspirations, as it is mentioned by the experts (see tables 4 and 5). Also, youth likes to earn a lot of money in a

short period of time (Interviewee number 5, table 4) and therefore they feel that growing seasons often take too long, which leaves them without income for longer periods of time. On the other hand, experts from both Ethiopia and Kenya indicate that often it is truly impossible to make a living from agriculture (see table 4 and 5). The agricultural sector is such that it gives very little rewards, and performs poorly. This causes women often dedicating themselves to agriculture for subsistence while men generate income with off-farm employment (FAO (a), 2014). Therefore youth often do not have positive perspectives from agriculture as an income-generating activity. However this is also related to education, for instance Marleen Brouwer explains that if you train youth in adding value in their production system, they could make more money in agriculture (personal communication, 30-09-2015). For instance, by incorporating multiple steps of the value chain in one business more profits can be generated. Likewise, incorporating marketing could be a way to increase sales.

According to the literature, income uncertainty due to yield variability is another reason for youth not to be interested in agriculture, young people want to be secured of a stable and good income would they choose agriculture as a lifelong profession (Afande, Maina and Maina, 2015). Agriculture is considered as employment for the poor, and because of the increasing visibility of status due to improving communications infrastructure, this profession is not considered to provide the lifestyle youth aspires to obtain and display (Afande, Maina and Maina, 2015).

Conclusion
The condition of income is very important, since as long as it is impossible to make a living out of agriculture, which according to experts is the situation, youth will still choose their ways out of agriculture. Interventions to increase income security in farming need to be made in order to attract youth.

Education

Within the condition of education many factors play an role. Experts state that there needs to be a bigger role for agricultural courses and capacity building in education (see tables 4 and 5), since at this moment many lack the necessary skills to work in different parts of the agricultural value chain. Some, like Yvonne Omwoda, even propose that agricultural courses should be part of the curriculum from the primary school on (see table 5). The problem related to the lack of skills (Interviewee number 1, table 4) is that education does not match the practice and demands from the field. Literature also refers to this, where is written that youth gets deskilled from agriculture by the education system and is not prepared for the practical work (White, 2012). When youth are able to obtain education on agriculture, it is often higher level knowledge and students get 'overeducated', with knowledge that is not applicable in practice (Afande, Maina and Maina, 2015 / Bezu and Holden, 2014). So, education can lead to unemployment and underemployment, because youth needs to generate some income, even if it is below their qualification level. This means that the higher educated are often also unemployed which according to Broussar and Tekleselassie (2012, p.21) is the result of the fact that the requirements of the labour market does not match the educational system.

Irene Mercy, Kenya
Irene Mercy is a 27 year old Kenyan farmer. She is married and has 4 children. She got married at a young age, and now has a farm together with her husband. Her parents also had a farm, with lots of crops because they lived in a fertile area. Irene mostly has poultry and small animals, not much crops because of droughts. To start her farm, she used a group-lending scheme. She feels that often the money for loans is too easily given, without providing training first. *"without training you cannot make it in agriculture. It is a difficult life, but with training it is possible. After training, money is loaned to the youth."*

Literature (Afande, Maina and Maina, 2015) and our experts during the interviews, say that also education can learn people to obtain a more commercial mindset towards agribusinesses, so that agriculture is not left for the less educated but has potential for the higher educated youth, to make money and commercialise the sector. This way value could be added more easily, due to the commercial mindset, and steps in the value chain could be merged to generate more income and profits. For this, it is mentioned that capacity building

and training is needed on the various elements of establishing businesses, and on the specific parts of the value chain the firm is in.

Conclusion
Agriculture still is seen as a profession for which education is not needed. Awareness of the necessity of trainings in agriculture is important. Youth needs to be aware of the modernisation of the sector, which enlarges their possibilities, but modernisation also requires the need for training and education. Therefore a condition in case of education could be the availability of specific agriculture-focused trainings, or the general level of education in the area, given that too high education leads youth away from agriculture.

Pull conditions

The conditions given above all indicate what is lacking and needed for youth to become involved in agriculture. However also pull conditions were mentioned by experts (see section 'pull conditions' in tables 4 and 5) and literature, as conditions that can be used to attract youth to the agricultural value chain. The two most mentioned pull conditions by the experts were community support and the use of ICT. With community support, youth is encouraged to go into agriculture. This could diminish their negative perceptions of agriculture. Furthermore, as said by Marleen Brouwer, youth are interested in modernisation and new trends such as the use of ICT and telecommunications in their employment (Personal communication, 30-09-2015). By modernising agriculture and incorporating innovations such as the use of ICT and telecommunications the value chain could become more interesting for youth. These could be new ways to interest youth in an age-old profession.

Discussion

This section consists of 3 parts in which outcomes of the research will be discussed by means of the research questions. Firstly, the value chains (farming systems and post production) and their actors will be discussed. Secondly, the perspectives of experts and youths on work in the agricultural value chain will be examined. Thirdly, the conditions influencing youth involvement obtained from literature and interviews will be dealt with. Conditions are ordered according to the difficulty of influencing them, starting with the most difficult ones. It is important to notice that all conditions are interrelated and that one cannot really be changed separately from the others. Therefore a holistic approach is needed to increase youth involvement in agricultural value chains, taking all elements into account. Lastly, a small discussion on the methodology is provided.

What do the maize and potato value chains look like in Ethiopia and Kenya, also regarding youth involvement?

To answer this research question only literature was used. It became clear that the value chains of both maize and potato were quite similar in Ethiopia and Kenya. There are, however, many actors involved which made it difficult to get a clear view on the structure. This might also be a problem for youth to step in, as the relation between different nodes of the value chains are not always clear. Bad infrastructure and means of communication make it more complicated for different actors in the chain to connect to each other. This could lead to insecurities with respect to sales markets and supply. Although the Kenyan and Ethiopian governments are involved with price stabilisation the market is not fully controlled and ad hoc interventions increase insecurities. It became clear that the entering of value chains is difficult due to the amount of paperwork involved, but not much information was obtained on specific policies and regulations. Therefore more research is needed to determine in which way and till what extend these could hamper youth involvement. These insecurities might withhold youth to step in. Information on current youth involvement was, however, difficult to find, therefore more research needs to be done on this target group. When we look at gender all nodes of the value chain include different activities where males and females will be attracted to in different proportions as they have different interests and capabilities. Also culture plays an important role here, as especially females are not able or accepted to perform certain activities. Specific information on this topic with regard to value chains was, however, also hardly found.

What is the perspective of organisations working with youth and youth themselves on youth involvement in the agricultural value chain?

The aspect that became most clear, especially from the interviews, was that agriculture is not seen as an attractive profession. Parents and teachers often discourage children to move into agriculture, especially in the production part. An important factor here was the assumption of low income and hard work, which makes youth prefer white-collar jobs. Furthermore, in starting a business several hurdles needed to be faced such as land and/or finance access, and obtaining knowledge on the subject, which are difficult to overcome. Both experts and organisations state that youth involvement could be increased, would conditions and perceptions change. As we only interviewed a few youth and used their information mainly as illustrations no real conclusions can be drawn about their perspectives. To be able to draw conclusions on youth perceptions in agriculture more large-scale research needs to be conducted.. Due to the time constraints for this research there was no possibility to execute this.

Which conditions influence the involvement of youth in specific value chains within the agricultural sector?

From both the literature and interviews conditions that are most important or youth involvement in agricultural value chains were determined. They are discussed below, starting with the ones most difficult to influence.

Difficult to influence:

Land

When youth start up their own business, especially in production, they need access to land, which is one of the most prominent challenges. Policy changes are needed to make it easier and more transparent for youth to obtain land and have the security of long term ownership, especially for females. These reforms should be based on knowledge and opinions of experts and youth themselves as they know what is really needed. Youth collaboration in the form of co-operatives can make it easier to obtain loans and larger pieces of land. Alternatively, youth could opt for employment with an already existing firm or look for work in a node of the value chain that does not require land.

Perception

Aspiration is also difficult to influence, since it is based on implicit assumptions youth have, which are formed through education, family, community and personal experiences. This could indicate that when conditions change, also perception will change. Aspirations between men and women can differ, with women often preferring to stick to agriculture and its activities. The promotion of success stories, for instance from these women, might help to improve the image of the agricultural value chain as can promotional campaigns from governments and NGOs. Youth might feel more attracted to agriculture when the sector is modernized and mechanization and ICT play a bigger role. Examples of modern practices could inspire others to become involved.

Infrastructure and market access:

In the value chains discussed market linkages are often not well established, which can result in blocked or at least delayed produce flow. Especially in isolated areas this can be a difficulty. However improving the level of infrastructure in an area or country is a process that needs long term investments and mostly is a task undertaken by the national governments, making it very difficult to influence. With regard to gender, it became clear that in some regions women are traditionally not accepted to ride motorbikes or go to larger markets to trade. This blocks or hampers their market access and their ability to engage in other parts of the value chain. However to change this traditions need to be altered, which is next to impossible to do in a top-down manner.

Easier to influence

Education and training

Education could play a major role for youth involvement in agriculture. Courses on agriculture in primary and secondary schools can be able to make youth interested in the agricultural value chain. There already exist some government programs to change the negative perception on agriculture and it might be useful to expand those. Furthermore the provision of (practical) training is of utmost importance, both for men and women. Without training youth do often not have enough knowledge on practices and finances to set up a viable business. ICT can be used as a tool to reach rural youth better and improve information exchange. Online networks and platforms for youth in the agricultural value chain can play an important role in connecting different actors and enable knowledge exchange.

Finance

The setting up of a business within the agricultural value chain requires money, which most youth do not have themselves. Banks and other loan facilitators are often hesitant with giving out loans and often ask for collateral. Cooperations could be useful in obtaining credit, especially for women, as they are generally regarded as more reliable when it comes to lending schemes and can together provide pledge. However it is important that there is trust within the group, otherwise youth is not willing to step into a cooperative and it will also not sustain. Also training is considered necessary before providing credit, to avoid risks of misuse due to lack of knowledge. An important observation is that only giving credit to a specific node of the value chain is not useful in the long term, as growth of that node is then hampered by other parts of the chain which stayed behind in growth. In interviews it was also stretched that bigger loans are needed to step into nodes of the value chain other than production. For youth to get more involved in the agricultural value chain the

availability, together with training, must be increased and at this point NGOs might step in as policy or bank attitudes are probably difficult to change.

Income

Income can be considered as the main incentive for youth to turn to or move away from agriculture. For most males, income works as a motivator to take up any form of employment. For women this is more complex, as also responsibilities at home come into play. Youth will be more attracted to agriculture when incomes would be higher. Therefore more value needs to be added to the produce in different parts of the value chain. This could for instance be done by vertical integration, where multiple steps in the value chain are executed by one person or company. Also, to reduce income uncertainty, crop insurances could be provided, to compensate for bad yields. However these might not be available or too expensive for small-scale farmers so more research needs to be done on this topic. Furthermore trainings on crop production, for instance about fertilizer use and disease control, can improve production processes and increase yields and thus income. The same applies to other parts of the value chain, where training can improve efficiencies and stretch profit margins.

A tool is created in order to assess the involvement of youth based on the conditions, which came out of the interviews. With this so-called dashboard the organisations are able to create an overview in one page of the situation in the field in relation to the farming systems or the value chain. This tool can be found in the appendix of this report. The dashboard is able to illustrate which conditions can be triggered to influence youth involvement.

Methodology

The base of this study is a literature review for which data is obtained via scientific databases as well as some grey literature and information from online databases. There was quite some information available on the maize and potato value chains in both Kenya and Ethiopia. However, it was sometimes difficult to find information for both countries on the same topic. Another major difficulty was to find information specifically on youth involvement in the specific value chains, as most information found was only about the general working force. The same problem was encountered with respect to gender. Most of the time the literature found did not make a distinction between male and female. These problems with lack of information were mostly visible for the post production part of the value chain. Therefore more research needs to be done on youth and gender in agricultural value chains.

To support the information found in literature we conducted interviews with 11 experts and 5 youth. These interviews were executed via skype and dependent on the availability of internet of the interviewees an online (video) conversation was started or a phone call was made. These interviews provided useful insights about the current situation in 'the field'. However, by conducting the interviews over skype, especially without videoing, it was hard to really connect with the interviewees. The connection was also not always good, which made it sometimes hard to understand each other and part of the information was not understandable. Language was another barrier, as the interviews were mostly executed in English (some in Dutch) and this was not the native language of our interviewees. Although the level of English was in general good, some information might have been lost as it is easier to express yourself in your native language. The division of experts per country was equal. We interviewed 5 experts in Kenya, 5 in Ethiopia and one that has knowledge on youth in general. For youth, however, this was a different story. It especially turned out very hard to reach youth in Ethiopia. This is mainly due to lack of access to means of communication and the fact that English is not often mastered well. This lead to the fact that we interviewed 5 youth from Kenya and only one from Ethiopia. As such a small sample is not very representative for the whole youth population, the information from those interview was only used as illustration. However, the general quality of the conversations seemed more than sufficient and useful, and interesting information was obtained.

Conclusion

When looking at the potato and maize value chain in Ethiopia and Kenya it can be seen that weak linkages between different actors, irregular supply, bad infrastructure, small trading units and lack of quality control are important factors that hamper value chain functioning. Specific nodes of the value chain where youth was more involved could not be identified, therefore no real conclusions can be drawn about the involvement of youth in the value chains. It is however suggested that parts of the value chain were more mechanisation and ICT is present youth is more attracted to, but more research is needed.

Considering the perspective of experts and youth on the involvement of youth in the maize and potato value chains it became clear that in general low income, difficult land and finance availability, lack of education and training, negative perceptions and bad infrastructure and market access causes youth not to be involved. When moving to the most important conditions that influence youth involvement the following were derived from literature review and interviews: land availability, perception and aspirations, finance, infrastructure and market access, income and education. These conditions were provided for organisations, to use them as indicators when looking at the inclusion of youth in agricultural value chains. They are useful to examine when looking at a specific part of a value chain and can be used as benchmark to identify the involvement of youth and influence it. It is very important to keep in mind that although these conditions probably need to be targeted separately, they are all connected and influence each other. One should also consider the fact that these conditions are general and need to be tailored to every situation and location, using on site research. Some of these conditions can be influenced by NGOs, for others active involvement of the government, educational system and communities are needed. The level to which these conditions can be influenced depends therefore on the situation and willingness of the parties involved to actively participate.

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Appendices

Appendix 1 Dashboard

Dashboard - Mapping tool to assess youth involvement in farming systems and the agricultural value chain

About

The dashboard is a mapping tool, the aim of it is to assess the attractiveness and involvement of especially youth in a particular community, region or country and focus on both farming systems and the agricultural value chain. The dashboard consists of two parts, a table and a graphic visualisation of the table. The dashboard is a first design to give an idea how the data on youth involvement can be visualised in one page. We encourage organisations to adapt and fine-tune the dashboard. With the dashboard the organisation can have an overview of the situation and can easily see which conditions are scoring low and where interventions can be done. We stress that this dashboard is not a tool with a focus on specific interventions but the focus is on giving an overview of the situation and show how each domain is scoring. The dashboard consists of six parts, which are derived from the research report, they are: (1) local context, (2) income, (3) perception, (4) resources, (5) education and (6) infrastructure.

The dashboard can be fulfilled with both data from academic sources, qualitative data extracted from interviews or personal knowledge, which is available in the field. The data has been made broad in purpose to be able to adapt it to the most actors and different situation possible. Not all the indicators need to be fulfilled to have a picture of the involvement capacity. Some indicators are easier to find in literature and are available for assessment of broad places, as the unemployment, others are more focus on field research or community knowledge as the perception of the family success.

Farming Systems and Value Chains

The dashboard is based on six parts or conditions. The role of these conditions are different for the farming system or the value chain. So while using the dashboard for mapping the situation in the field one needs to keep in mind which group is targeted, are they related to the farming system or to the the value chain. In the table below for each condition shortly an indication of the different impact on farming system or value chain is described. Nevertheless one needs to be aware that this is only an indication and will be different for each specific context. We stress the importance of being aware which group is assessed and what their relation is to the farming system and/or the value chain in order to get the right information and right interpretation by using this tool.

For whom and why

The dashboard is a mapping tool. It can be used by non-governmental organisation (NGO's) or other organisations working with youth and farming systems and/or the value chain. It can be filled in by experts from the organisations. The information which is required for filling in the dashboard can be specific, need research and can be time consuming. Nevertheless we are convinced that thorough mapping and analysis is required and worthwhile to get an overview of the situation and if done properly will pay back later. The overview or filled dashboard can then be used as a foundation for analysis and as a starting point for exploring the domains of interventions that can be taken for each condition.

We encourage practitioners and organisations to adapt the dashboard in order to let it fit better to the context in which they work.

How to fill in the dashboard

In the table below the steps are shown which needs to be taken in order to fill in the total dashboard. In the first column the indicators are explained. The dashboard starts with filling in the information on 'local context' and continues anti-clockwise, with income - perception - resources - education - infrastructure. In the second column the definition of the indicator is given. Next column can be used to identify the target group for which the table is filled in. The fourth column provides an example of a question that can be asked in order to find the data. We give some guidelines for where the sources can be found for the data ranging from official sources as World Bank data to personal knowledge. The next column shows an clarifying illustration how the specific part of the dashboard could look like. The last column gives space for the practitioner to fill in what the domains of possible interventions can be in order to change the outcome of the specific indicator. On the dashboard each condition has three starts which can be coloured showing if the overall level of the particular condition is low or high. If for example one star is filled this condition has a low score and needs attention.

How to read the dashboard

Each condition or domain consist of several indicators that give insights in each of them. The different conditions do not stand alone but are interlinked and influence each other. This means for example that the availability of resource can have influence on the condition of education or vice versa. We encourage organisations to define the connections between each of the domains of conditions. A filled in dashboard gives the reader an overview of the situation in one page.

Indicators	Definition	Case Study	Interview question	Source	Intervention Domain
Local context (on country, region, community- level, or for a particular farming system or value chain)					
Percentage of youth in the population	The percentage of people between the age of 18-35 years old (Take youth as construct into consideration)		What is the percentage of youth in the population?	(Internet; literature; interview; personal knowledge)	
Gender	The percentage of male and female population in the case study		What is the percentage of female in the case study?	(Internet; literature; interview; personal knowledge)	
Unemployment	The national unemployment and the percentage of unemployed youth in the total youth population.		What is the percentage of unemployed people? What is the share of unemployed youth over the youth population?	World bank data; International Labour Organisation (Internet; literature; interview; personal knowledge)	

Youth by sectors	Division of the youth by sectors of working activity. We distinguish four sectors: primary, secondary, tertiary, public.		What is the division of youth by sectors of activity?	(Internet; literature; interview; personal knowledge)	
Income					
Farming System	Revenue based on work at farm in relation to labour intensity				
Value Chain	Revenue based on specific jobs in the value chain in relation to labour intensity				
Revenue	Comparison of the revenue of the workers in the particular case study and the national average revenue.		What is the difference between the national average revenue and the revenue of the workers in the farming system or the value chain?	wageindicator.org (Internet; literature; interview; personal knowledge)	
Revenue Allocation	Allocation of the revenue to the different expense of the household. The categories are open.		To which main expenses do people allocate their revenues?	Africa development bank (Internet; literature;	

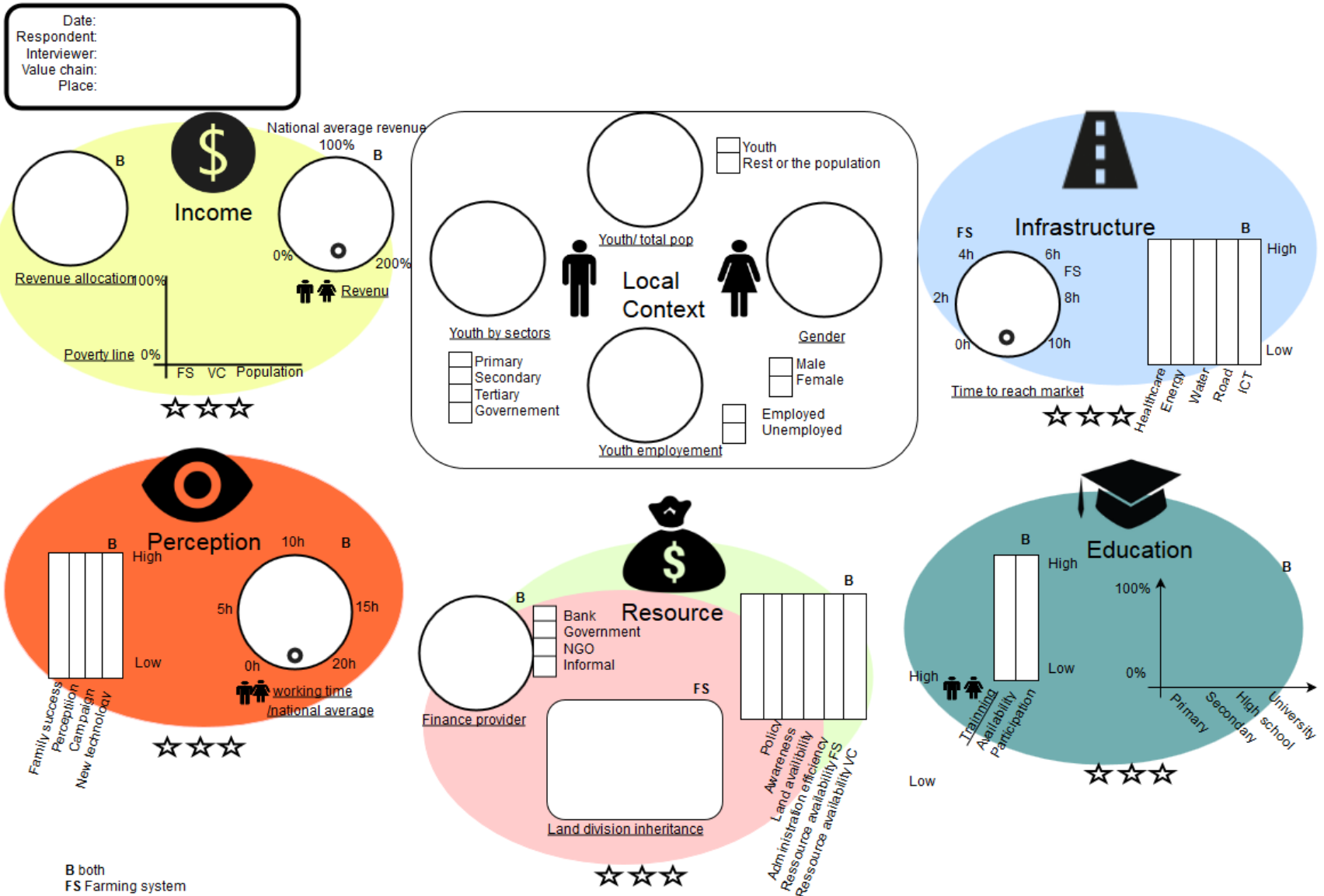
				interview; personal knowledge)	
Poverty line	Percentage of the population below under the poverty line and the percentage of the population (FS or VC) below under the poverty line.		What is the share of the population living under the poverty line? And in particular for the workers of the particular farming system or value chain?	World bank data (Internet; literature; interview; personal knowledge)	
Perception					
Farming System	The perception on Farming Systems is focussing on the labour intense work on farming and assumes that the role of status influencing attractiveness				
Value Chain	The perception related to the value chain can be diverse, depending on which part of the value chain is assessed. Attractiveness will differ at activities in the different parts value chain				
Working time	The amount of working time of the people in the case study population compared to the national average working time.		How long does the average worker work per day? How long does the workers of the particular value chain or farming system work per day?	mywage.org (Internet; literature; interview; personal knowledge)	

	(Youth prefer flexible hours, and little amount of work and high income)				
Status	The perception of different actors in references to the job of the case study. (Family success, perception, campaigns, new technology)		How are the workers of the particular value chain or farming system perceived by their surroundings?	(Internet; literature; interview; personal knowledge)	
Resource					
Farming System	Resources related to the Farming System focus on aspects of the Farming System as capital intensivity, necessity of machinery and access to land (inheritance)				
Value Chain	Resources in relation to the Value Chain focus on access to, and availability of capital to start a business				
Finance for youth	Origin of the capital available for youth divided by bank, government, NGO and informal sources		Where do the capital for youth workers of the particular value chain come from?	(Internet; literature; interview; personal knowledge)	

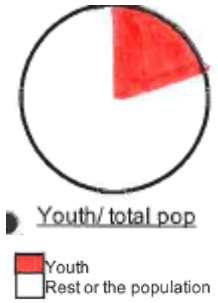
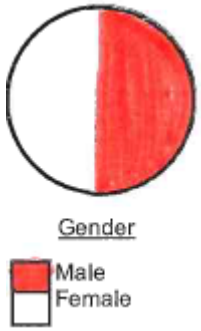
Land division inheritance	The average number of children per household determine the division of the land		At the death of their parents in how many parts the land are to be divided?	(CIA website: the world factbook) (Internet; literature; interview; personal knowledge)	
Availability of resources	Factors influencing the availability of resources. Looking at policy, awareness, land availability and administration efficiency.		How do policy, awareness, land availability and administration efficiency influence the availability of resources?	(Internet; literature; interview; personal knowledge)	
Education					
Farming System	Education in relation to Farming Systems focus specifically on agricultural trainings and the availability and access to them				
Value Chain	Education in relation to the Value Chains are a variety of trainings depending on which part of the value chain is assess, ranging from training for driving license (transport) to managerial trainings				
Participation in training	The amount of training available and the amount of people		How many trainings are available for workers of the farming system and value chain? and how many people	(Internet; literature; interview; personal knowledge)	

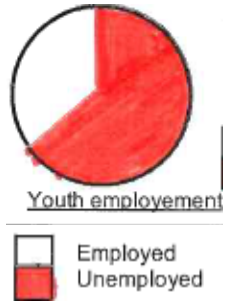
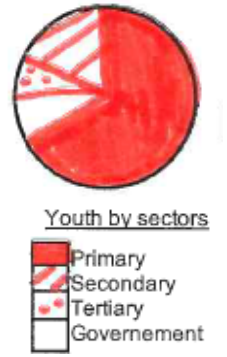
	participating to training.		do participate to those training?		
Education level and agriculture at school	-The percentage of enrolment regarding the level of study -The percentage of those person having received agriculture class.		What is the share of peoples having a primary, secondary, tertiary and universitary degree? and what is the share of those people having agriculture classes?	-World bank; (African Development Bank) (Internet; literature; interview; personal knowledge)	
Infrastructure					
Farming System	Infrastructure in relation to Farming System focus on time to reach markets, and availability of energy, water, roads which are necessary for production				
Value Chain	Infrastructure in relation to the Value Chains focus on the requirements which are needed for the specific part of the chain, related to energy, roads, water or ICT				
Time to reach market	The average time to reach the market from the production place.		How many hours do workers of the value chain take to reach the market?	(Internet; literature; interview; personal knowledge)	

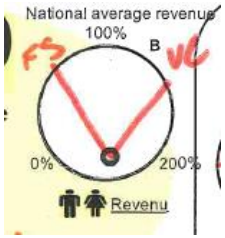
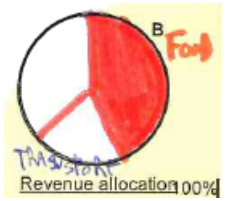
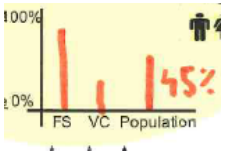
Infrastructure perception	The perception of the population of the case study towards the present infrastructures regarding ICT, healthcare, energy, water and roads.		What is your perception of the availability and quality of the following infrastructure: ICT, healthcare, energy and water.	(Internet; literature; interview; personal knowledge)	

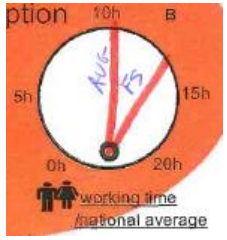
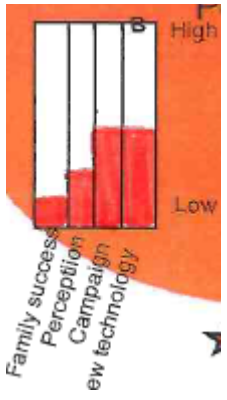

Date:
Respondent:
Interviewer:
Value chain:
Place:
Income
B
National average revenue
100%
B
0%
200%
Revenu
Revenue allocation
100%
Poverty line
0%
FS VC Population
Youth
Rest or the population
Youth/ total pop
Local Context
Youth by sectors
Primary
Secondary
Tertiary
Governement
Gender
Male
Female
Employed
Unemployed
Youth employement
Infrastructure
FS
4h
6h
FS
2h
8h
0h
10h
B
High
Low
Time to reach market
Healthcare
Energy
Water
Road
ICT
Perception
B
High
Low
10h
B
5h
15h
0h
20h
working time
/national average
Family success
Perception
Campaign
New technology
Resource
B
Bank
Government
NGO
Informal
Finance provider
FS
Land division inheritance
B
Policy
Awareness
Land availibility
Administration efficiency
Ressource availability FS
Ressource availability VC
Education
B
High
Low
100%
0%
B
High
Low
Training
Availability
Participation
Primary
Secondary
High school
University
B both
FS Farming system
VC Value Chain

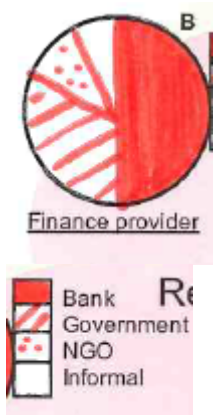
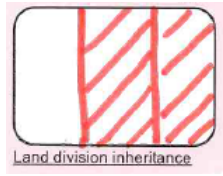
Dashboard explanation case of Kenya Maize Value Chain

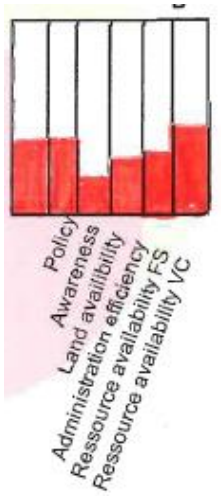
Indicators	Definition	Case study	Interview question	Source	Illustration	Intervention Domain
Local context (on country, region, community- level, or for a particular farming system or value chain)						
Percentage of youth in the population	The percentage of people between the age of 18-35 years old (Take youth as construct into consideration)	20% of youth in the total population	What is the percentage of youth in the population?	Index mundi (Internet; literature; interview; personal knowledge)		
Gender	The percentage of male and female population in the case study	50% of the study population are female.	What is the percentage of female in the case study?	World Bank data (Internet; literature; interview; personal knowledge)		

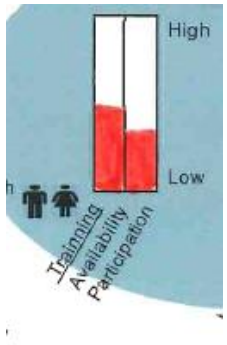
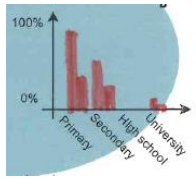
Unemployment	The national unemployment and the percentage of unemployed youth in the total youth population.	9.2% of the Kenyan population is unemployed. 17% of the youth (15-24) is unemployed	What is the percentage of unemployed people? What is the share of unemployed youth over the youth population?	World bank data; International Labour Organisation (Internet; literature; interview; personal knowledge)		
Youth by sectors	Division of the youth by sectors of working activity. We distinguish four sectors: primary, secondary, tertiary, public.	Unknown (exemple: Primary 70% Secondary 20% Tertiary 5% Government 5%)	What is the division of youth by sectors of activity?	(Internet; literature; interview; personal knowledge)		
Income						
Farming System	Revenue based on work at farm in relation to labour intensity					
Value Chain	Revenue based on specific jobs in the value chain in relation to labour intensity					

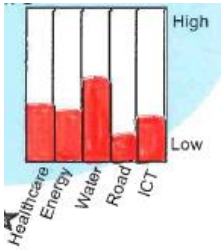
Revenue	Comparison of the revenue of the workers in the particular case study and the national average revenue.	Unknown average income (example: the average income is 700Ksh) The average revenue of a farm foreman is 400 Ksh per day. Medium-sized vehicle drivers: 894.90 Ksh	What is the difference between the national average revenue and the revenue of the workers in the farming system or the value chain?	wageindicator.org (Internet; literature; interview; personal knowledge)		
Revenue Allocation	Allocation of the revenue to the different expense of the household. The categories are open.	45% to food and non alcoholic beverage. 14% for transport. 8% for housing, water, gas. 7% for restaurant and hotel 6% miscellaneous good and services	To which main expenses do people allocate their revenues?	Africa development bank (Internet; literature; interview; personal knowledge)		
Poverty line	Percentage of the population below under the poverty line and the percentage of the population (FS or VC) below under the poverty line.	45.9% Poverty headcount ratio at national poverty lines (% of population) Unknown for FS and VC (example 60% of FS and 30% VC)	What is the share of the population living under the poverty line? And in particular for the workers of the particular farming system or value chain?	Word bank data (Internet; literature; interview; personal knowledge)		

Perception						
Farming System	The perception on Farming Systems is focussing on the labour intense work on farming and assumes that the role of status influencing attractiveness					
Value Chain	The perception related to the value chain can be diverse, depending on which part of the value chain is assessed. Attractiveness will differ at activities in the different parts value chain					
Working time	The amount of working time of the people in the case study population compared to the national average working time. (Youth prefer flexible hours, and little amount of work and high income)	52 hours per week. Unknown for farmer (exemple farmers work 65 hours per week.)	How long does the average worker work per day? How long does the workers of the particular value chain or farming system work per day?	mywage.org (Internet; literature; interview; personal knowledge)		
Status	The perception of different actors in references to the job of the case study. (Family success, perception, campaigns, new technology)	Family success 10% Perception 15% Campaign 30% New technology 30%	How are the workers of the particular value chain or farming system perceived by their surroundings?	(Internet; literature; interview; personal knowledge)		

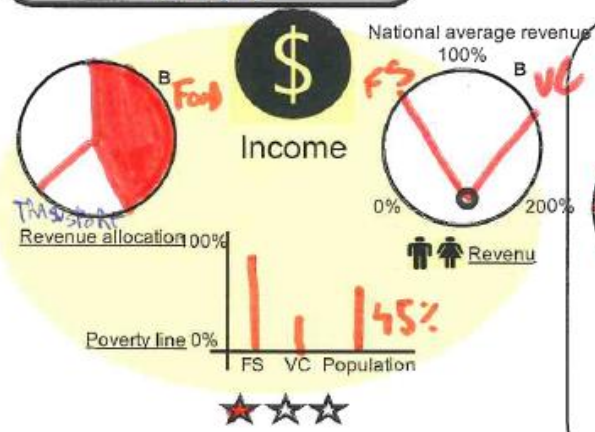
Resource						
Farming System	Resources related to the Farming System focus on aspects of the Farming System as capital intensivity, necessity of machinery and access to land (inheritance)					
Value Chain	Resources in relation to the Value Chain focus on access to, and availability of capital to start a business					
Finance for youth	Origin of the capital available for youth divided by bank, government, NGO and informal sources	Unknown (example: 50% from bank, 30% from government, 10% from NGO 10% from informal sources.	Where do the capital for youth workers of the particular value chain come from?	(Internet; literature; interview; personal knowledge)		
Land division inheritance	The average number of children per household determine the division of the land	In Kenya the average household is about 5 person, 3.31 children	At the death of their parents in how many parts the land are to be divided?	(CIA website: the world factbook) (Internet; literature; interview; personal knowledge)		

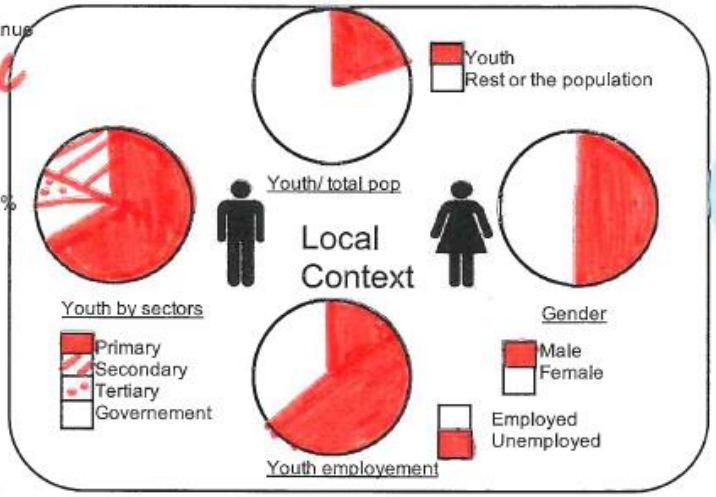
Availability of resources	Factors influencing the availability of resources. Looking at policy, awareness, land availability, administration efficiency, ressource avaibility	Policy 30% Awareness 30% Land availability 20% Administration efficiency 20% Resource availability FS 25% VC 40%	How do policy, awareness, land availability and administration efficiency influence the availability of resources?	(Internet; literature; interview; personal knowledge)		Increase awareness of policies and efficiency of access to land
Education						
Farming System	Education in relation to Farming Systems focus specifically on agricultural trainings and the availability and access to them					
Value Chain	Education in relation to the Value Chains are a variety of trainings depending on which part of the value chain is assess, ranging from training for driving license (transport) to managerial trainings					

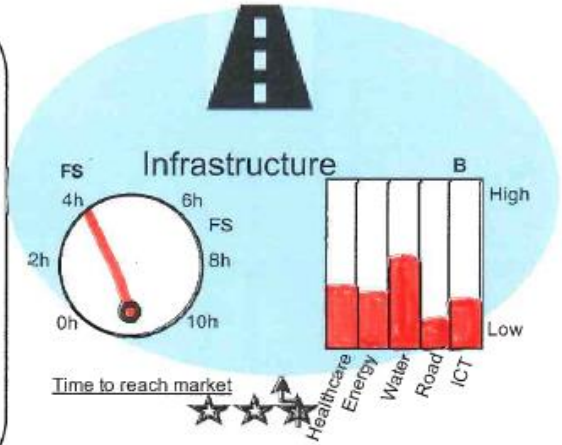
Participation in training	The amount of training available and the amount of people participating to training.	Availability: 40% Participation: 30%	How many trainings are available for workers of the farming system and value chain? and how many people do participate to those training?	(Internet; literature; interview; personal knowledge)		increase the awareness and the number of trainings
Education level and agriculture at school	-The percentage of enrolment regarding the level of study -The percentage of those person having received agriculture class.	Primary 83% of school enrolment Secondary 55% of school enrolment Tertiary 4% of school enrolment	What is the share of peoples having a primary, secondary, tertiary and universitary degree? and what is the share of those people having agriculture classes?	-World bank (African Development Bank) (Internet; literature; interview; personal knowledge)		Increase the number of obligatory years of school
Infrastructure						
Farming System	Infrastructure in relation to Farming System focus on time to reach markets, and availability of energy, water, roads which are necessary for production					
Value Chain	Infrastructure in relation to the Value Chains focus on the requirements which are needed for the specific part of the chain, related to energy, roads, water or ICT					

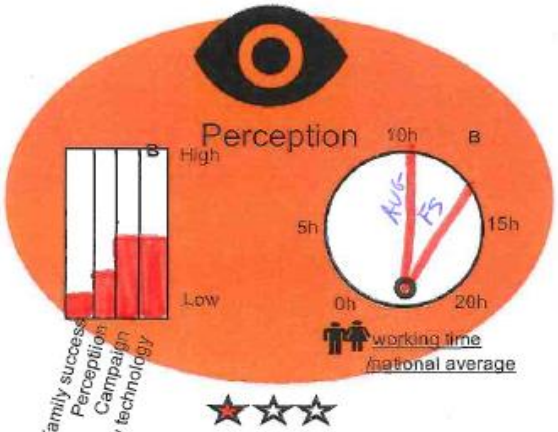
Time to reach market	The average time to reach the market from the production place.	75% of Kenyan farmers need at least 4 hours to reach the market.	How many hours do workers of the value chain take to reach the market?	(Internet; literature; interview; personal knowledge)		Improve linkages between actors
Infrastructure perception	The perception of the population of the case study towards the present infrastructures regarding ICT, healthcare, energy, water and roads.	Unknown (exemple: ICT 20% road 10% healthcare 30% energy 25% water 40%)	What is your perception of the availability and quality of the following infrastructure: ICT, healthcare, energy and water.	(Internet; literature; interview; personal knowledge)		Need of investment for modernization

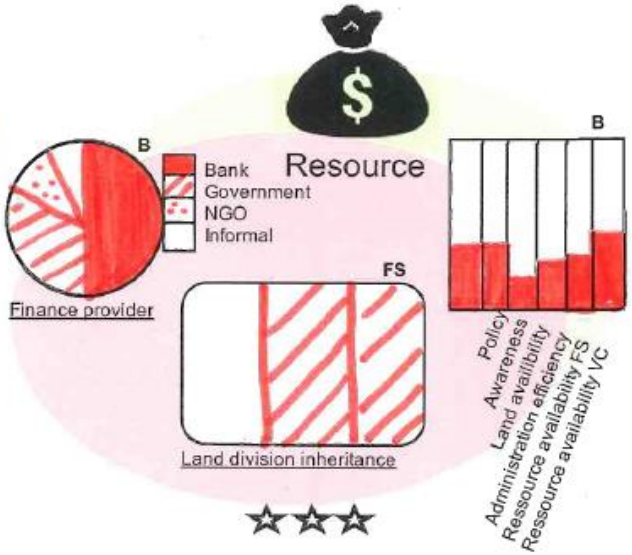
Date: 15/10/15
Respondent:
Interviewer:
Value chain: MAIZE
Place: KENYA

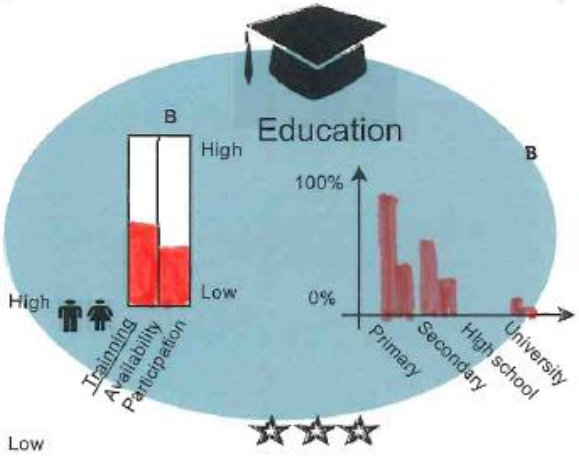












B both
FS Farming system
VC Value Chain

Appendix 2 Interview questions and transcription tables

Appendix 2.1 topic lists interviews experts and youth

Outline interview experts:

1) Present ourselves and the project
2) Ask him/her to present himself
3) Their definition of youth
4) Their definition of a value chain (what does it look like)
5) How youth is involved in Agricultural value chain
5) What is the perception of youth on working in agriculture (status)
6) Why, Push and pull (what attracts them, conditions)
7) Which interventions do you take?
    - What is their reasoning as to why it works

8) in your view what are the most important conditions/ indicators needed to improve youth involvement in agriculture

Outline Interview youth:

1) Present ourselves and the project
2) Ask him/her to present himself

job, story, situation

3) Their definition of youth
4)Perception of working in agriculture
5) What is the perception of other youth on working in agriculture (status)
7) Why is youth interested or not in agriculture? Push and pull (what attracts them - which conditions)

gender differences

8) in your view what are the most important conditions/ indicators needed to improve youth involvement in agriculture

Appendix 2.1 Interview summaries experts Ethiopia

(Remark: this table can contain raw data from the interviews. The recordings are available at the authors of this report)

Interview	Ethiopia	Expert
Interviewee number 1		
Interview Interviewee number 1, large international NGO, 01-10-2015 11:00		Coordinator for a project, promote african grassroots empowerment through education.
Their definition of youth		
	15-29 age	
	Both male and female. Look at gender equality, but we work more with females. Because they are more vulnerable.	
How youth is involved		
Where		
Perception of youth (status)		
-	Depends, more focussed on the profit, and hard work. Much time, more effort, motivation is needed	
-	Position of youth; at high level it is difficult for them to get their voice heard. They raise a rights issue, in form of association it is difficult, but with organisations it is better, through us for example.	
-	Rel. between older and youth; youth are community members, they need to take the example of the elder, they cannot stand by themselves according to the elders, awareness problem .(this is not the reality but the belief of the most community because they believe that youth is on fire age- being much sensitive)	
Push and Pull Conditions		
-	More economic and social, they need to have training or study, to do agribusiness; they need to travel in order to get training. They need to go to high institutions like university	
-	Infrastructure and transportation is an issue. They need somebody to support them in the rural areas. Family support: 85% of our community is in agriculture, not only youth is into agriculture	
-	The land is of their parents, they need to have their own land to do agriculture	

-	Urbanisation is very much an issue. Reasons are often economic. Need to do activities other than agriculture. South: migrate to Addis, do things like shoe polishing. Leave family behind, they go home once a year during holidays. Remittances? They will take gifts and money home when they go. Do they start own farms with their farms? No they need to continue other businesses like petty trades.	
-	Finance; difficult to get finance, for all business, they are advising them to form cooperations and to get loans this way with collateral and interest. They can also invest by a village loan association. They meet every week for one hour, they will decide the amount to save every week, they all have small amounts of loans to start small businesses.	
Which interventions		
	Project: two components: livelihood and education's, elementary school, building and rehabilitations. Support for library and so on in rural areas. Level of education: elementary. Do they stay in rural areas? Yes, after grade nine they travel to towns. Association, and vocational and life training for youth to help them get jobs. For those who only completed grade ten. From 45 days to nine months, for carpentry, manufacturing, etc. Youth from agricultural background? They try to keep their interest in agriculture in for instance bee hiving. Why they choose these jobs; interest and accessibility of those trainings and budget, and job opportunities.	
-	Government: forming associations etc., depending on their interest they will provide them with support esp. working places. Programs for agriculture for youth: yes, main challenge is access to land. They need to give them land to do this activity, horticulture or cereal; it is difficult to give them enough land. Solution; not sure, plan is negotiating with ministry of agriculture, how we can involve youth more in agribusiness. Most used crops; cereals, teff, barley, wheat, maize, sorghum. Interesting for youth; more in fruits, cereals; they think they need to do a lot of work for it. Also need ploughing for which they need horses	
-	Loans; working good, but it depends on how and where to save which is difficult. Example; youth rented land and planted cereals to get more profit from their work. Best mechanism for low-income communities. They give the training, how to save and manage and so on.	
-	Interventions that did not work; everything will work if we involve youth from the beginning, in designing, implementation and monitoring and evaluation. During design, we need to consider the main problem of the youth. That is why they need to participate, to identify the main problem.	
Most important conditions		
-	Build their capacity, skills training, help them to have at least some agricultural start-up capital, rent land or buy land, to forfeit other recoupments like the products they are going to plant.	

	Link them with the ministry of agriculture, and other organisations that are working more with agricultural business	
Interview	**Ethiopia**	**Expert**
Interviewee number 2		
Interview on 1/10		
Their definition of youth		
	Young age, free spirit, strong energy to do any work	
How youth is involved		
Where	The older generation is controlling agriculture at the household level; the young farmers are not so many in agriculture production.. Youth are involved in other parts of the value chain	
Amount	Small numbers, many youth do not like to be involved in agriculture	
Perception of youth (status)		
-	The perceptions are different with each age group and the level of education that they have. Agriculture is less attractive to the high school children; agriculture work to them is not good and looks more attractive to college level and older young people. In university they have good perception of agriculture.	
Push and Pull Conditions		
-	The initial capital is important. Credit is available, but not enough.	
-	Land availability and lack of market linkage	
-	There is a shortage of skill and knowledge	
-	Policies do consider agriculture, but not with youth much	
-	Youth use ICT	
Which interventions		
	We work in the south of Ethiopia. We do long trainings for youth. The trainings can be on animal, plant and natural resources. We provide short-term trainings for neighbour farmers to improve their capabilities. And we try to interest the youth also in dairy production.	
Most important conditions		
-	Credit and finance	
Other relevant information		
Interview	**Ethiopia**	**Expert**

Interviewee number 3		
05/10 14.40 Dutch farmer in Ethiopia	Representatives of potato companies in the Netherlands (HZPC) in order to provide Ethiopian farmers with input for potatoes. Tool in order to increase the production of smallholder farmers. Work with a model farm to show to smallholders the way they work. Invite the community to start a producer group, 50-60 farmers who under their supervision do the same as their model farm.	
Their definition of youth		
	The average age in Ethiopia is 48, so I would say until the age of 25. Often those who do not have their own family, and have no, or less formal position in the community. They are youth until they have enough money and a family they start to take part in the community, with the elders of the community.	
How youth is involved		
Where	Youth often leave the villages to the places where the jobs are, often this are the informal jobs, for a day or so. To get a contracted job is far more difficult. It is often the bigger companies that offer jobs. A lot of young people are for Examples drivers in the transportation sector. But youth do work; I got last week a list from a producer group with several young people between 24-28 year.	
Perception of youth (status)		
-		
Push and Pull Conditions		
-	Income is the first thought of youth when choosing a job. If youth are looking for jobs in the agricultural sector, their main concern is if there is a market. They are also concerned about quality of seed, mechanisation, but the market, and access to it is the capital question. Access to land is not a real issue, only foreigners talk about that. Often plots of land are available to youth, they get it easier than foreigners. Formally the government has the land rights, but in practice the communities are responsible for it. If they want to give it to youth, there are possibilities.	
-	Internet and telephone network lead to more openness. Small farmers can know the real prices. Still this is not a real solution, since if you are still not connected to good markets in the neighbourhood and dependent on traders, those traders still keep asking too high prices, and are in a power position.	
Which interventions		
	There need to be more investment in the postproduction phase. The country is stuck in the production phase, which still is increasing rapidly. Investment in the secondary sector is therefore important. Invest in the other parts of the value chain. Discuss with foreign banks, NGO's not to invest only in microfinance for farmers, but also for the processing parts and the rest of the chain. It is nice to give 500 farmers more credit	

	in order to produce 1000 extra bags of crops, but these needs to be processed, transported, and for these links in the chain is almost no attentions, and even less finance available. The focus on smallholders and their production is going great, but gets lost if the next link in the chain is not developed. And these next parts of the value chain are especially the parts where the youth can be involved.	
-	There is almost no cooperation between farmers. Everybody is doing their own job trying to make the most money themselves, not realising that cooperation can result in more profit for all.	
Most important conditions		
-	Finance available in order to make investment in the rest of the value chain	
	Create farmer groups, cooperation, which together makes use of resources, and link them to wholesalers, which leave the step of the traders out. Often traders are problematic, asking unfair prices. They are too powerful, biggest part of the profit goes to them. They are the old-boys networks, have the authority and power, difficult to deal with.	
	Corruption is a big problem. Example in which several farmers created together a cooperation, and made a deal with a state company. The end of the story was that they got even less money from the government lead company than they would have had from the traders.	
	There is no economic basis for the agricultural sector. People cannot make a living with it.	
Other relevant information		

Interview	**Ethiopia**	**Expert**
Interviewee number 4		
06/10/2015	Works in Addis Ababa on programs about children. Provide education and support on value chain and agribusiness and cooperate with partners on this.	
Their definition of youth		
	Difficult for different reasons. For me it is 15-25, for the government it is 12-29. There are different age categories used.	
How youth is involved		
Where	Not in large scale, cereals. It is scarce and difficult to have big scale. Too many inputs are needed. Youth prefer high value crops, where businesses on small scale with less input are possible.	
Perception of youth (status)		
-	For youth urban is better, rural is seen as backward and	

	agriculture is hard work with low income. It is seen as the last resort. Perception can be improved through trainings to improve skills. It is seen as a sector for not educated people. Need to change the perception of youth and make them active actors. The whole community shares this perception, parents to, no success in agriculture.	
Push and Pull Conditions		
-	Youth is struggling with income and wants to be in the cities with better facilities. For them there are no role models, they can't see a future in agriculture.	
-	Access to land, land is assigned through a ranking made by the government, elders are favoured, while youth is discouraged.	
-	Look to risks, e.g. price fluctuations can be scary for young farmers, because they have to take risks. Risks can be a reason why youth is not involved.	
Which interventions		
	The state is implementing some developmental projects, but mainly focused on urban areas. But they are aware of the problems. There are some conferences about youth, and youth policies. The state can facilitate the access to resources.	
-	We as organisation try to involve stakeholders and set up a good model. We design a program. Investment and microfinance is needed to start up a business. We have to develop an entrepreneurial thinking, giving hope and showing that agriculture can be profitable. Teaching work attitude, ethic.	
-	We support the development of youth and improve their knowledge. We try to make them have the same vision. We organize trainings to develop skills and entrepreneurial thinking. We have programmes on beekeeping (honey) and horticulture and dairy.	
-	We try to make the forward steps of the chain attractive, where value is added. Because of the use of ICT and technology, processing steps can be more attractive to youth. We coach youth in the process and teach them how to use software. IT students should be involved in the value chain.	
Most important conditions		
-	Youth should be skilled, on practical aspects. Access to finance, there is a shortage of credit. And need investments in land. Also the linkage with the market is a huge problem. The lack of infrastructure complicates everything.	
	Youth look for shortcuts and easy ways. Lack of focus. We need to engage them on a long-term basis. There is a need of collaboration with other actors. Need of support by stakeholders for input and knowledge.	
Interview	**Ethiopia**	**Expert**
Interviewee number 5		
	Did a project on youth involvement in agriculture. Works on	

	youth involvement in Sesame business project.	
Their definition of youth		
	Depends on policy, 15-29, based on government. Does not really matter on whether you have children or not, you become more of an adult then.	
How youth is involved		
Where		
Perception of youth (status)		
-	Youth have negative perception on agriculture. There is an negative influence of parents, it is seen as poor men's work. In general youth like to earn money in short period of time, if they get other opportunities they will go there.	
Push and Pull Conditions		
	Prefer to work in cities, better services and infrastructure. Construction is booming, small cities become bigger; youth likes to work there, daily labour. Getting fast money. They also like to migrate to other countries, to Saudi Arabia, because they expect to get more money there but this is not always the case. Lot of people were not treated well in Saudi Arabia and came back to Ethiopia.	
-	Land; all land is owned by the government, you can lease it for xx period (he does not remember). Pressure, if you are not doing well as farmer, the government is redistributing land. Or farmers are forced to other places. You need a lot of investment and insecure whether you can keep the land and you can also get a bad piece of land that you first need to clean. Finance is main problem. They get support for business plan, education is not the problem. It is a lot of work, go to many offices, it is bureaucratic.	
-	Policy - 70% to technology, 30% to agribusiness after elementary school. There is examination that pushes students in certain direction. Education after elementary school is to good division.	
-	Lot of graduates like to work for governmental organisation, expect more money there. Do not want to be involved in agribusiness. Better career perspective there.	
-	Parents do not support children to work in agriculture; they want them to become a doctor or something.	
Which interventions		
-	It's really important to focus on that agribusiness can be profitable! At the end it's all about the money. Profitability is very important > create awareness, also to be proud to do it. This awareness creation can happen through education, youth offices (small and micro emphasize offices), and government.	
-	More change for youth if the chain is longer.	
Most important conditions		

	Finance	
	Status	
Other relevant information		
Gender	Ploughing is difficult for women. Males are often earning the money so are more often in the marketing part (spot market). But selling is more done by woman (farmers market). Women are better in saving money, man go and drink beers. If it's a female headed household, how is she doing the labour, is she hiring people.	

Appendix 2.2 Interview summaries experts Kenya

(Remark: this table can contain raw data from the interviews. The recordings are available at the authors of this report)

James Kamotho		
	African youth initiative on climate change	
Their definition of youth		
	Youth are aged between 18-35 years old for both male and females	
	Social status, not married, no children, even if you are 45	
	Persons with no responsibility	
How youth is involved		
Where	Depends on season/climatic conditions and where you live if they are workers	
	Provide labour on farms and some are farmers involved in chicken/pig/dairy farming	
	Rabbit keeping have been coming up under youth	
	Grow exotic crops like strawberries	
Amount		
Perception of youth (status)		
-	Agriculture is the last resort. Once you decide to go into agriculture there is no going back.	
-	Farming is hard work	
Push and Pull Conditions		
-	Land scarcity. But depends where you are. Highlands + Nairobi land is scarce.	
-	Poor performing economy. - Because of economy people leave agriculture for other industry.	
-	Farming is hard work.	
-	Grains are more for bigger farmers, capital intensive	
-	Globalisation + new communication ways/info has been positive, available to everyone, new planting techniques	
	Media does a good job to make agriculture look cool again. Good to inspire the youth.	
Which interventions		
	Look for niche market.	

-	Use knowledge to farm differently than parents	
-	Government there has a business fund biashara (Swahili) fund. Giving loads of loans and other incentives to youth to go to agriculture.	
Most important conditions		
-	Politics is involved, issue of land is serious issue	
	Giving loads of loans and other incentives to youth	
	Land reform act needed	
Other Relevant information		
	Generally youth have no collateral for bank loans. Land belongs to older generations. Ask money from parents and friends	
	There are platforms like Ebay. You post what you want to sell and vice versa. OLX it is called.	
Interview	**Kenya**	**Expert**
Joel Otieno Otiang	28/09/2015	
Their definition of youth		
How youth is involved		
Where		
	Mostly labour work. Casual work. Also, going to town to look for work. Often, short employment.	
Amount	Lack of employment. Depend on their family to feed them. Majority; jobless. Also, not sustainable so they get disappointed	
Perception of youth (status)		
-		
Push Conditions		
-	Lack of marketing, low price	
-	Lot of maize, but nobody to buy it. Very little rewards.	
	They do not get money; they do not have the patience to invest.	
Which interventions		
	They need training first. They have a governor that is very supporting, there is goodwill, but at the end product the youth will get money, not earlier. Support in terms of material, but not given money, they get distracted then. After everything they get money.	
-	Forming youth groups, in every village. Strategic plan 3 years, addressed strengths and weaknesses. Workshops of all colours of youth. --> Needed: Strengthen youth organisations and leadership. Link with Agri-ProFocus, influencing county government, they appear to support the youth. Youth are not always paid, so there is a gap, with their strategic plan they try to build capacity.	

-	Government initiated project; youth from urban area got training and were very willing to do agriculture. Products like bananas and groundnuts. They were being formed into groups.	
Most important conditions		
	Good farming conditions, good access to the land	
Other Relevant information		
	When youth get land without doing anything, it is not good. They first need to go to the village elder. They do it jointly, then it is very possible to get land and youth are very happy.	
Interview Douglas Onyango	**Kenya**	**Expert**
	de nada organisation	
Their definition of youth		
	Youth from 18 to 35 years old	
	Underage work in farms is not allowed because school is mandatory until 18	
How youth is involved		
Where	Youth is mostly involved in production. We are not doing well in the processing.	
Amount	Low involvement	
Perception of youth (status)		
-	Working in rural area is associated mostly with old people. Young generations do not want to work in agriculture, they prefer to go to cities after school	
-	Youth prefers to look for office works in town	
Push and Pull Conditions		
-	There are bad policies, especially ineffective because people do not even know that they exist. There is no awareness of the subsidies. This an issue in Kenya and the government is working on this. Policies are there but not implemented.	
-	They do not own their own land. In most of the cases they work in their parents' land.	
-	In some cases they borrow money from banks or government with loan systems, but it is a long procedure with a complicated bureaucracy.	
-	Family support through us of land from parents	
Which interventions		
	We work for construct a new vision of agriculture among students. Do agriculture as a business, not just agriculture (subsystem) but agribusiness, how to earn from agriculture even without subsidies	
-	We build water pans to store big quantities of water.	
-	Organization focuses on teenage mothers. We are doing programs on teenage mothers and we link you mothers to the government.	
Most important conditions		
-	Youth often does not have enough money for providing the necessary starting capital	

	Policies	
	Governance is an important actor. It can have a big influence on youth participation.	
Other Relevant information		
	Often men stay in the cities and girls go back to the birth rural areas where they work in the agriculture.	
Interview Michael Asudi	**Kenya**	**Expert**
	Kenyan coordinator of Organisation of African Youth	
Their definition of youth		
	Kenya uses the construction of the African Youth Charter, which says 18-35. There are social aspects, like education. They are not so important since we officially use the terms of age.	
How youth is involved		
Where	In formal ways the youth is present in harvesting, and also on contract. IN weeding and planting, especially in some bigger farms, many have contracted youth as labourers. Next to that, many are contacted as labourers in the packaging. Often agriculture is ruled by family network, it is a family business in which the whole family works.	
	There is a lot of informal employment, since land ownership is a big, big problem, as youth cannot own their own land. It is only by inheritance, but parents cannot give their children their portion of land before they pass away.	
	Youth is involved in maize and potato chain, I came across, in the central part, the rift valley. Some are involved but mainly on the big farms. Only few have their own. In potato business a good number of youth is involved.	
Perception of youth (status)		
-	Generally very negative. Very few prefer working in it. Most of them go to school and want to go to office. This is also a result of the colonial education system. Parents also promote to go to school. You should go to school and not to the farm. And the opportunities in the agricultural sector are generally very negative.	
Push and Pull Conditions		
-	Land ownership - land is owned by the parents. Through inheritance - parents can't give a portion.	
-	There is no movement or organisation that helps (economically) and farming is expensive	
-	Lack of awareness - people do not know the opportunities. Only 20 per cent is arid, we need good conditions, water and irrigation, needs equipment, finance is lacking. This all is the problem.	
-	Capacity building awareness - and use of ICT. The focus of these aspects can get them into agriculture.	
-	Rural - Urban migration - pushing to urban. They go to town to get job. End job in the city. The development is in the town not in the rural area. The town is far easier. There is nothing that keeps you in the village, no network, no infrastructure. The average age of a farmer is 67 year.	
Which interventions		

	There is low farming support from community and family. Parents push youth to look for jobs in the government and private sector. This needs to change.	
-	Our organisation is doing on advocacy and government related goals. We organise youth program. Look to the role of policy and advocacy and create awareness. We invite organisations that work with agriculture to create awareness. We do not manage; we look for opportunities for youth and link them to organisations. We support people.	
-	We lobby for the increase of agribusiness hub and link youth with different relevant organisations	
Most important conditions		
-		
Other Relevant information		
	I have a farm myself. I have maize and onions. It is a family business. We started with support from the family. We don't have machinery but we hire. Smallholders hire tractor, if they can afford. Now I am working on a greenhouse to grow vegetables. I have 3-4 people working on my farm. The positive thing is that the family owns the land. So that is the input, and labour is not much and it is cheap.	

Interview	**Kenya**	**Expert**
Yvonne Omwodo		
	29 years old At SID (Society for international development) we are doing research about the state of youth involvement in Kenya, Uganda, Tanzania Rwanda and Burundi. They look at Country studies (?) and policies that encourage youth involvement and what policies are lacking. Also look at vocational training institutes, what trainings are available. Also climatic studies, GMO, livestock. Nr of youth involved in livestock. Conditions that are needed/lacking to be involved. Hopefully it will influence policy. SID is research organisation, they hire consultants. The government is commissioner. End of month paper will be out about programs governments are implementing.	
Their definition of youth		
	Youth are any person between 15-30, different cultures have different definitions. Not after marriage anymore	
How youth is involved		
Where	Youth mostly found in production phase. Most live in rural areas and work in the family farm.	
Perception of youth (status)		
-	Agriculture is last thing you do if you don't have a job or go to school. If you fail, the teachers say: you go work in the school farm as a punishment. Is considered as a bad thing.	
-		
Push Conditions		
-	Key thing is money; perception is that you cannot make much money by working in a farm.	
-And Pull Conditions	If you tell youth that you will make a lot of money by growing potatoes they will do it.	

Which interventions		
Most important conditions		
-	Also difficult to get land. It is a big issue.	
	Infrastructure is limiting factor, most of infrastructure is key to export. Road from central Kenya to port (flower), rest of country is not well connected. Maize and potato are not exported. They import maize. She does not know about the postproduction part.	
	Education is key, the have agricultural courses in school from basic primary school on. If you remove this you are going to interfere with involvement in future.	
Other Relevant information		
	Parents push their children to pick up education and move out of farming. Her parents do not like to see her go back to farming. Because for them it has been a trouble to make money so they don't want to see her in the same situation. She tried to make poultry into agribusiness but her parents told her NO only do this as last option	
	A lot of women are involved in processing (mostly flowers); working conditions are poor, low wages. She thinks that for people working in production he male/female share is 50-50, but farm ownership is actually always male, because they inherit the land. If husband dies you are kind of the farm owner but the land then belongs to the community or husbands brother.	

Appendix 2.3 Interview expert Marleen Brouwer

Interview	General	Expert
Marleen Brouwer		
	Junior Advisor Centre for Development Innovation (CDI)	
Perception of youth (status)		
-	No interest in agriculture	
Push and Pull Conditions		
-	Problem of succession gap - youth is not interested anymore in the agricultural business, therefore the older generation is not able to transfer the farms, but also knowledge to the next generation.	
-	ICT is still a problem in the rural area, but will improve soon. Although, if big groups of people won't have access to internet or telephone the coming years, they will lack behind, which is a major threat to them. We tend to think that everybody is connected, but often the most vulnerable are not connected.	
-	Interest - bad image, people don't know how to make money in agriculture. People find the idea of poverty anxious so go to cities.	
Which interventions		
	Look to local banking systems. According to her every project should focus on access of land and credit.	

	Companies take over big plots of land from small farmers, and use the farmers as contract labourers/farmers. This can be positive; downside is the decreased role of the farmers themselves, and the risk that the company gets too much power.	
	Role of (western) business, want to make money, but maybe need to change their way of processing, in order to be more able to use youth. Is for western business money leading, or giving chances to youth. According to her the last perspective can also be profitable.	
-	Interventions must be done in connecting youth together, but also with organisations. ICT can play a big role and can be a strong method for youth.	
-	Good to see that there is, also due to internet, increased knowledge in what one's rights are, which services you can expect from the government.	
-	One need to empower people, make them aware, and inform them - can be done through movements - from this mindset it is important to attract companies and investors.	
Most important conditions		
-	Infrastructure, but she expects that this will improve rapidly.	
	Change mindset of youth, that they are able to make money in agriculture, add value to products themselves and work on capacity building.	

Appendix 2.4 Interview youth Ethiopia and Kenya

Interview	**Kenya**	**Youth**
Alphaxard Gitau		
	I am a young person, am a farmer currently in Zambia attending a conference called African green revolution for development of young people in Africa. I am an entrepreneur in poultry and dairy products. I supply to different outlets. I have my own farm, of half an acre. I am 24 years old.	
Their definition of youth		
How youth is involved		
Where	I think more in the ICT aspect, in creating new innovative solutions, apps, online.	
Perception of youth (status)		
-	It is a passion for me, I love it. We need to get to the point that we 'monetize' what we love. So, just as my parents did it, but more mechanised. But my parents are also farmer. I have the land from them. I studied, I am graduated in economy. But it is my passion, and the biggest sector. We employ ourselves. For me I love it just so much and there are more opportunities for me as well.	
-	Young feel that it is an old school kind of activity, with lot of labour. It is dirty work, the old school venture, they are not interested.	
-		
Push Conditions		
-	Important condition, it is showing that you can make money with it. Me should make money, and teach other people, To show them that it is possible. My friends got in office, parents thought that was better, they open own business and work in	

	banks.	
-	Let them see that it is not a bad job but that it can give a lot of money. Making money from agriculture is better and can give more money than being in an office.	
Which interventions		
	Politic work on the incentives, have programmes. They have a few programmes. Are not yet getting there, it is a long way for them. Some programmes but needs much more work.	
Most important conditions		
-		
Other Relevant information		
	Women do not have much opportunities, it is a matter of resources that are required. The opportunities are there, resource is the problem, it is capital intensive, and you need them. Man have access to land, property and assets, to get loans and finance for Agriculture. Women have no access to land and property. Why? It is African culture, women should not have land. That was before. It is now changing. In the old days only man could have it.	
Interview	**Kenya**	**Youth**
Victone Onyango 02/10/15		
	Western Kenya, family of 8, first-born, college level degree, bachelor of commerce, FPA, accountancy, work with young people within Kenya. Has INUKA Success organisation, young people and issues to do with agribusiness, education and climate change. Youth empowerment in economics etc. membership; people from within community, capacity building, how they can carry farming, how they can add value addition, how to reach market opportunities. To reach the wider market.	
Their definition of youth		
How youth is involved		
Where		
Perception of youth (status)		
-	Farming not interesting for youth, youth rather want to be in the office, it's all about the attitude towards farming. Youth prefer white collared job.	
-	Most parents want better jobs for their children, most young people then look at farming as not interesting.	
-	Lots of opportunities and markets within farming, but everyone wants to do other jobs	
Push Conditions		
-	Most farms are owned by parents. Youth cannot have own land; it is very hard for	

	youth to get ownership in their community.	
-	Another challenge: finance, youth have difficulty to access loans for start-up farming. Access to resources and finance is difficult. They need a guarantee for the bank, which is difficult.	
	Youth tend to be mostly mobile.	
And Pull Conditions	Want to be involved in the development of the community.	
-	Government give loan to start agribusiness	
-		
Which interventions		
	Parents take children to school; they are being told that they do not want to work on the farm. Parents interest them to look for other jobs in the town.	
-	Partnerships and collaboration with organisations in and out Kenya, think tanks, more support from partners coming to assist and capacity training.	
Most important conditions		
-		
Other Relevant information		
	There is more women involve in farming; people view farming as a women responsibility → cultural view. UWEZO fund. Help for young farmers.	

Interview	**Kenya**	**Youth**
Joseph Kamau & Fred	25 & 24 years old	
	Have a company processing horticultural product for kitchen purpose. (Ginger, saffron, chillies, garlic...) They are three young Kenyan to have started the company.	
Their definition of youth		
	Youth until 30 years old	
How youth is involved		
Where		
Perception of youth (status)		
-		
Push Conditions		
And Pull Conditions	Flexibility hours	
-	His remuneration from the company is modest (average) but it's mainly because the company is just started. He thinks that with higher remuneration more youth will be attracted.	
-	He just leaves his office job to work in his company full time. Now he has average income but he has good perspective to develop. The condition here is the possibility to develop your own business.	

Which interventions		
	-Open the youth found, any youth with entrepreneurial idea can go there and have resources to start their business.	
-	-Ameran Kenya, company help youth to create their business, particularly for youth group. For example finance greenhouse. Also provide technology such as seeds, fertilizer... to turn their land into real profit.	
Most important conditions		
-	-Access to resource, mostly for the status of the company. He needed to pay 25000shilling (2000Dollars) for the registration of the company. Mainly to pay the lawyer and the registration fee.	
	-Easier way to registrate, less bureaucracy. Especially for illiterate it's almost impossible.	
	-Really hard to register without lawyer.	
Other Relevant information		

Interview	**Kenya**	**Youth**
Jomo Eddy Coly		
	I am 26 and I work for an organization that works on poultry farmer, especially with cooperative societies. I work on poultry farming; my goal is produce benefit for the community and especially for youth. I want to enable youth to fight food insecurity in the community and empower youth. I took an internship on poultry farming through the international labour organisation. I gained knowledge and now I teach and transfer it I do not own land my parents do. It is a family land of 0,5 acre. An institution borrowed me money for starting up my business. I made a market research and I realized there was a niche, therefore I approached them. They saw a sample of my product and then they placed an order. Now I have one on one contract, they place an order and I supply them. I sell one day old chicken too and I provide to costumers after sale assistance. I follow them to give my help. I do not clean chickens but sometimes I kill them.	
Their definition of youth		
	Up to 30	
How youth is involved		
Where		
Perception of youth (status)		
-		
Push Conditions		
-	Youth does not like agriculture; they look for white-collar jobs, because in	

	agriculture incomes are not enough.	
Which interventions		
	Youth is not patient and refunding is too slow, we try to make it quicker.	
-	Organising forums for youth where they can increase their awareness and show them knowledge and experiences.	
-	Show successful stories and make them more courageous.	
Most important conditions		
-		
Other Relevant information		
	Men look more for white-collar jobs and then women still have to feed their families, and they invent themselves as farmers.	
Interview	**Kenya**	**Youth**
Irene Mercy		
	27 year old female farmer with 4 children with a background in agriculture has a farm with her husband. They keep poultry and small animals, no crops due to droughts. She gets food from it, keeping them is a problem because they get sick sometimes, and often they die because you cannot get money on time to heal them.	
Their definition of youth		
How youth is involved		
Where		
Perception of youth (status)		
-	Being a farmer; very good and encouraging to the youth. Youth are very interested in agriculture.	
-	Agriculture is the only thing that can help youth. They cannot be accommodated in their lifestyle. They want white-collar jobs, but you cannot accommodate them all. Agriculture can help them improve their life.	
Push and Pull Conditions		
-	Youth does not get any support for going into farming, so they run away. Even though it is the best option in the area.	
Which interventions		

	Easier to get finance in groups? In times, the leaders of the groups are good and they can get good finance. Without training you cannot make it in agriculture. It is a difficult life, but with training it is possible. After training, they are watching how they were progressing and then give them some money.	
-	Without training you cannot make it in agriculture. It is a difficult life, but with training it is possible. After training, they are watching how they were progressing and then give them some money.	
-	Kenya youth empowerment program; train youth and give them internships, they want to find out why youth cannot get jobs. Some of these youth like agriculture, they all like different things. They are all put in places, which they like. After every evening they get a token. Youth are thought to understand who they are and when you know who you are you can do anything.	
Most important conditions		
-	Finance with training	
Other Relevant information		
Interview	**Ethiopia**	**Youth**
Seife Bogale		
	I am 30 and I graduated in horticulture 8 years ago, then I worked as an agronomist in the flower industry, I am a farm manager and importer for flower farms. I had no choice; I have been randomly assigned to horticulture department by the government. Then I had 4 years of college and 8 of working.	
Their definition of youth		
How youth is involved		
Where	Horticulture is a big sector for youth, with intensive work and tough jobs. There are long-term employments with contracts.	
Amount		
Perception of youth (status)		
	Better of horticulture, for example tomatoes. Crops are less tough. Good reward, income from agriculture	
-	Agriculture is seen as low class with low social status, especially small-scale farming.	
-		
Push Conditions		
-And Pull Conditions	According to their interests, present a nice plan and facilitate access to capital.	
Which interventions		
By government	Import machinery; provide credit and investments even through banks. To Have access to credit you need to have land then the banks can provide you the 70% of the initial investment. Most common are cooperatives.	

Most important conditions		
-		
Other Relevant information		