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Bureaucratic corruption and market access

The case of smallholder farmers in Nigeria

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Abstract

This thesis addresses the question of how bureaucratic corruption affects the market access of smallholder farmers in Nigeria. In this context, two sub-questions investigated where such corruption occurs and what transmission mechanisms can be observed. To answer these questions, 12 expert interviews were conducted and analysed using the qualitative content structuring of Mayring. This material was supplemented with current research, and theoretical foundations of principal agent and transaction cost theory.

The results indicate a strong negative effect of corruption on market access, either directly or indirectly. It affects the resource base and technology of smallholder farmers due to their dependency on government services, where corruption results in unequal treatment, the resale of resources at market prices and negative consequences for the quality, availability and access to services. Unequal treatment in the public service provision and moribund institutional settings, particularly in terms of road infrastructure, contribute to skewed power relations between smallholders, their competitors and market intermediaries resulting in a strong impediment for market functionality. Particularly the smallholders' competitors use corrupt payments to gain advantages, while smallholders are deprived by corruption from a variety of opportunities. Market functionality is further impaired by extortionary practices on markets contributing to the deterring nature of such payments, which also occur in formalisation procedures and during transportation and heavily constrain the smallholders' market orientation.

Relevant corrupt practices occur in governmental offices, banks, distribution centres as well as on farms, markets and roads. The transmission mechanisms where found to include three levels. The strategic or policy formation level, the operational or implementation level as well as the tactical level, which include personal interactions with bureaucrats. The former usually result either in lost opportunities or even detrimental effects on farmers, while the latter generates costs aggravated by power imbalances between extortionist and smallholder farmer.

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List of abbreviations

ADP	Agricultural Development Programme
APP	Agriculture Promotion Policy
CofO	Certificate of Occupancy
FAO	Food and Agriculture Organization
GESS	Growth Enhancement Support Scheme
n	Sample size
NAFDAC	National Agency for Food and Drug Administration and Control
SARS	Special Anti-Robbery Squad
SON	Standards Organisation of Nigeria
UNCAC	United Nations Convention Against Corruption

1 Introduction

In October 2020 protests erupted in Nigeria. End SARS - what started as a protest against police brutality of the Special Anti-Robbery Squad (SARS) has evolved into a movement with numerous demands - amongst them the elimination of corruption (George, 2020; BBC, 2020; Gladstone and Specia, 2020). Corruption in Nigeria is described as “endemic” (Deckard and Pieri, 2017, p.372), “a way of life” (Osoba, 1996, p.371) as well as the “biggest challenge” (Hope, 2017, p.127) or “greatest obstacle” (Page, 2018, p.1) for the country’s development. The current president, Muhammadu Buhari, came to power in 2015 with a campaign to fight corruption, but does not seem to have realised these promises so far (CISLAC Nigeria, 2019). This is particularly observable in the Corruption Perception Index of Transparency International, where Nigeria currently ranks 149 out of 180 countries in the world (Transparency International, n.d. a) compared to rank 139 in 2012 (Transparency International, n.d. b)¹.

The government’s anti-corruption efforts, focussing mostly on grand corruption cases, seems to have only marginally affected bribe seeking behaviour (UNODC, 2019, p.83). This “Petty corruption” as distinguished from grand corruption, is often used to describe bureaucratic corruption. The term “petty” however does not mean that its effects are neglectable, as it is sometimes even considered the major constraint to private life organisation and the engagement in productive activities in African countries (Mbaku, 2016, pp.683–684). Although it may not be as newsworthy as large-scale political corruption, “administrative bribery [...] is the type of corruption that mostly affects the daily lives of ordinary citizens” (UNODC, 2019, p.13), which can be just as destructive as its large-scale counterpart as these bribes can negatively affect the rule of law, the allocation of resources and accessibility to public services (ibid., p.13). Jong-sung and Khagram (2005, p.139) further establish that the poor are more likely to be deprived access to the latter, since they are more likely to be extorted and pay petty bribes in the attempt to secure basic public services. They conclude that corruption is “likely to reproduce and accentuate existing inequalities” (ibid., p.154).

These observations are particularly relevant to the target group of this study – smallholder farmers. In Nigeria, 72% of smallholder farmers are living below the poverty line. They make up 88% of all farmers in the country and are majorly concentrated in rural areas (FAO, 2018, p.1), where agriculture employs almost 84% of households and accounts for 56% of net income (World Bank, 2014, p.vi). Furthermore, agriculture makes up 21% of the Nigerian GDP and employs 36.5% of the labour force (FAO, 2018, p.1). The relevance of agriculture is media-effectively acknowledged by the government (THISDAY, 2019) and observable in the “Green Alternative” or Agriculture Promotion Policy (APP) 2016-2020 which particularly emphasised

¹ This is also reflected in the Corruption Perception Index score [0 (worst) – 100 (best)] with 25 in 2020 (Transparency International, n.d. a) compared to 27 in 2012 (Transparency International, n.d. b).

the role of market linkages for the rural poor and the significance of rural markets (FMARD, 2016, p.12). However, beside quite positive assessments of the policy itself (Odunze, 2019, p.70), media reports suggest that the policy did not reach the intended results (Ekin, 2020). The reasons for this ineffectiveness may be manifold, but the role of corruption is even mentioned in the policy itself, as it acknowledges the necessity to fight “corruption on all programmes involving public resources” (FMARD, 2016, p.13).

The potential role of corruption for the market access of smallholders can be found in Arias et al. (2013, p.11), where corruption and malfeasance are listed as risk factors within the determinants for market participation, or market access (ibid., p.21). This paper does not fully engage in the debate if markets are beneficial or not. The assumption is, that markets are able to generate income and increase production (van Tilburg, van Schalkwyk and Obi, 2012, p.3) and that in the current capitalistic system the compelling requirements for survival are monetary means (Swanson, 2012, p.16). Thus, market access for smallholders is not only crucial for food security and poverty reduction (Arias et al., 2013, p.5), but “critical for agriculture to become the main driver of pro-poor growth” (OECD (Ed), 2007, p.154).

Based on the aforementioned observations a critical relevance of bureaucratic corruption for the daily lives of smallholder farmers may be assumed. For them, market access is indispensable to derive monetary means from their major economic activity – agriculture (Anderson et al., 2017, p.23). “Endemic”, as the extent of corruption in Nigeria was described before, basically means that it is the norm rather than the exception (U4 Anti-Corruption Resource Centre, n.d.). It might be assumed that bureaucratic corruption is indeed a very tangible occurrence that influences the extent to which smallholders are able to engage in markets. Therefore, the question must be asked – “How does bureaucratic corruption affect the market access of smallholder farmers in Nigeria?” – . While studies on corruption majorly address quite general effects on economic growth, Foreign Direct Investment or income inequality (Dimant and Tosato, 2018, p.18), they largely rely on quantitative data - particularly in the area of economics (Bader et al., 2014, p.24). As Heywood (2017, p.42) suggests, this study engages in a meso-level investigation at the level of the nation state beyond indices and rankings. However, where he suggests to investigate the causes as well, this study solely embraces his suggestion to engage in a study of understanding how corruption takes place and what particular characteristics (effects, forms etc.) it has (ibid., pp.40–41). From the latter explanations and the formulation of the research question, the sub questions – What are the transmission mechanisms of particular forms of corruption to smallholders? – and – Where does corruption happen in the daily lives of smallholders? – are derived.

To answer the research question, 12 expert interviews were conducted for this study. The results of the evaluation according to the structuring qualitative content analysis by Mayring

(2014, 2015) form the empirical core of the following work. For the introduction and theoretical and literary framing of the empirical part, the terminology within the research question is first discussed and explained. This represents the basis of the entire work and precedes the theory chapter in which relevant theories are introduced. With this background, it is possible to assess the current state of research regarding the individual aspects of the research question. In the following methodological section, the fundamental building blocks of the empirical analysis are outlined, the details of which can be found in the annex in the form of transcripts, coding guidelines and summary tables. With recourse to the state of research and the theoretical assumptions, the results are then analysed in a discussion to characterise the data with regards to the research question. The empirical and discussion part are structured on the basis of the categories used in the qualitative analysis (indicated by C.1, C.2, etc. in the headlines). The discussion is followed by a separate chapter on critical reflection of the empirical and literary contents. The conclusion contains a summarising answer to the research question as well as further implications and recommendations that may be formulated on the basis of the results.

2 Terms and concepts

Within the research question, there are three key expressions – smallholder farmer, market access and bureaucratic corruption. A common understanding, definition and explanation of these terms is indispensable for the subsequent analysis.

2.1 Smallholder farmers

First of all, it is of utmost importance to define and characterise the target group of this research. The characteristics of smallholder farmers cover a wide spectrum, which is described and explained in the following.

In order to understand the numbers and global significance of smallholders it may be beneficial to consult figures based on the size of land². There are about 570 million farms in 167 countries worldwide (Lowder, Scoet and Singh, 2014, p.4). Based on a sample of 460 million farms in 111 countries from a comparison of World Census of Agriculture surveys in 1990 and 2000, only six percent of farms are larger than five hectares. The estimates for farms with less than one hectare amount to 410 million farms and 475 million farms with less than two hectares respectively (ibid., p.12).

There is a wide agreement, that smallholders are key to global food security and nutrition. Despite accounting for only 12% of the world's farmland, they account for 80% of food production in Sub-Saharan Africa and Asia, providing livelihoods for more than 2 billion people (Fan

² Using this approach for Nigeria, however, would have a distinct disadvantage, since Nigeria has four primary agro-ecological zones (World Bank, 2014, p.6), so that the definitions for smallholders would differ between the zones (Dixon, Tanyeri-Arbur and Wattenbach, 2004).

and Rue, 2020, p.3). Even though the size of a landholding is often used to define smallholders it widely differs from one country to another (ibid., p.2). Hence, despite their significance, there is no operational definition for smallholder farmers (Khalil et al., 2017, p.5). This can also be observed in the “Data Portrait of Small Family Farms” of the Food and Agriculture Organization (FAO) project which has “the objective to set the ground for a standardized definition of smallholders across countries” (Squarcina, 2017, p.1). Without an agreed definition of smallholders, the only remaining option is to approximate a definition for the context presented in this paper.

In fact, there is quite a variety of approaches to definitions of smallholders for various contexts. Khalil et al. (2017, pp.40–46) list no less than 55 definitions of smallholdings. The authors find four general approaches from which definitions are derived – the factors of production, the type of management of the holding, the market orientation of farms and the economic size of a holding (ibid., p.10). For the present work it seems suitable to define smallholders on the basis of their market orientation. Cervantes-Godoy, Kimura and Antón (2013, p.7) describe smallholder as characterised by their struggle for competitiveness and thus the provision of income for their families and themselves. They face resource constraints, particularly land, as well as missing or underdeveloped markets and often live in poverty or extreme poverty. This characterisation may be extended by the addition that farmers are “small” when the scale of their operations is “too small to attract the provision of the services he/she needs to be able to significantly increase his/her productivity” (Kirsten and van Zyl, 1998, p.555) and in that they are resource constraint in comparison with other farms (Dixon, Tanyeri-Arbur and Wattenbach, 2004). Farms included in this definition could be subsistence, pre-commercial and transition farms in delimitation to specialized and diversified farms according to the typology of Alliance for a Green Revolution in Africa (AGRA, 2017, pp.12–13). This delimitation may, according to the aforementioned characterization, be particularly based on the fact that access to seeds, fertilizer, finance and insurance occurs on commercial terms (ibid., p.12). This is of particular significance as Kirsten and van Zyl (1998, p.555) mention that particularly smallholder farmers are in need of governmental assistance due to the lack of access to various services.

As can be observed in the name, the FAO projects use the term “small family farm”. Even though it is true that small farms are in fact family farms, since most labour is supplied by the family (Rapsomanikis, 2015, p.15), this paper embraces the term “smallholder farmer”, as used by Rapsomanikis (2015, p.1), who also relies on the Data from the “Data Portrait of Small Family Farms”. In fact, in the explanation of the latter it is confirmed that “the concepts underpinning the definitions of smallholders and family farms coincide” (FAO, n.d., p.1). Therefore, a narrower characterisation of the farm as a family farm is not necessary for the present context and should be disregarded. This work refers to other reports than only the FAO data and thus it may be beneficial to embrace a broader term. The differentiation between small-scale (size)

and smallholder (tenure) may also be disregarded as, this paper follows the assumption of Khalil et al. (2017, p.5), who assumes that these terms refer to very similar entities. Therefore, smallholder farmer and smallholders will be used interchangeably throughout this work.

More than half of the 186 million inhabitants in Nigeria live below the poverty line of USD 1.9 per day, from which the majority lives in rural areas. 73% of the target group of the paper – smallholder farmers - are part of this group (Anderson et al., 2017, p.13; FAO, 2018, p.1)³.

Table 1 Smallholder farmers characteristics

Characteristics of smallholder farmers in Nigeria		Factor
Farm aspects	Average farm size (ha)	0.53
Income and poverty	Smallholder poverty rate	73
	% of income from on-farm income	55
	% of income from non-agricultural wages and self-employment	43
Capital and inputs	% of households using motorized equipment	16.2
	% of households using fertilizer	44.5
	Irrigation (% of land)	2
Markets	% of households selling crops through informal channels	100
	% of households selling crops in the local markets	94
	% of households buying ag. inputs in the local markets	94
Innovation and technology	% of households recipient of extension services	6
Constraints	% of agricultural production sold	26
	% of expenditure for inputs on value of production	18
	% of credit beneficiary households	7
	Distance of land from road (km)	14

Adapted from: FAO, 2018, p.2.

As shown in Table 1, the smallholders' primary occupation is farming, even though a large percentage is earned by non-agricultural wages. The farmers widely use fertilizer, but rarely irrigation measures. For the small share of produce that is sold, the small farmers use informal channels. Production necessities are procured locally, whereas they spend a large share of their production value on inputs. The farmers rarely receive credit and extension services.

2.2 Market access

As aforementioned market access is crucial for smallholder farmers. In research (Arias et al., 2013, p.21; Jari and Fraser, 2012, pp.62–63; Poole, 2017, pp.20–21) two expressions are used almost interchangeably, or with seemingly unclarified distinction – market access and market participation. However, the two expressions slightly differ.

“Market participation is the ability of an entity to participate in a market efficiently and effectively. [...] it implies the transition [...] from subsistence farming to a market

³ The numbers are different in the FAO Data Portrait. Here the percentage is only 44 per cent (FAO, 2020). This is because they consider the national poverty lines for the data portrait (Squarcina, 2017, p.5), which is about USD 0.99 per day [calculated from 137,430 NGN per person and year (NBS, 2019, p.5), which is about USD 361.62 (recalculated on exchange rate of 16.05.2021, 20:11 (XE.com Inc., 2021b) per year, divided by 365 is equal to about USD 0,9907 per person and day].

engagement mode, whereby inputs are increasingly purchased and outputs sold off the farm to traders. It is a process as well as an outcome.” (Poole, 2017, p.17)

This definition of market participation overlaps with the characterisation of market access, which “includes the ability to obtain necessary farm inputs and farm services, and the ability to deliver farm products to buyers.” (van Tilburg and van Schalkwyk, 2012, p.35). The working paper, which is the basis of the Smallholder Market Access Tracker index of National Agricultural Marketing Council of South Africa states that “Commercialization is a process that entails market access, which in turn entails market orientation and market participation” (Ngqangweni et al., 2016, p.2). In their interpretation “market access relates to the breakthrough from obstacles that hinder smallholder farmers’ market participation” (ibid.). Thus, relying on the definitions of Poole (2017) and Ngqangweni et al. (2016) it can be concluded that market participation as a process includes a transition from subsistence farming to market engagement. This transition, which is equal to the aforementioned breakthrough, is in fact the moment that represents “market access”. In this view, market participation is a process that includes market access and an outcome, effective and efficient market participation.

The complex network of constraints and determinants are best understood, when reading Arias et al. (2013, p.11), where the authors provide an overview of the characteristics of smallholders which determine market participation, in conjunction with Arias et al. (2013, p.21), where the authors lists various market access constraints. Smallholder characteristics, such as decision making (subsistence vs market orientation), resource base (land, labour, water, governmental support⁴), technology (technical efficiency etc.), and food security (off-farm income, cash flow deficit) (ibid., p.11) are affected by resource constraints (land, soil, water, education, capital), technological constraints (labour, land, efficiency, storage, know how), subsistence needs (household dependencies, off-farm income) and financial constraints (credits, cash-flow). Additionally, there are risk factors (ibid., pp.11-21) that affect the decision making of smallholder such as failure to deliver, weather, malfeasance, pests and inconsistent policies (ibid., p.21).

The connectivity to markets or market orientation majorly relates to remoteness and the confronted transaction cost (ibid., pp.10-11), as well as product constraints (surplus, quality, seasonality, cultivation needs) (ibid., p.21). Therefore, the decision to participate in markets depends on their ability and willingness to engage in markets (see above: smallholder characteristics), and on the market functionality (ibid., p.13). The latter is determined by market integration, economic size, power relations and institutional settings (ibid., pp.10-11) which relate to structural constraints including legal framework, infrastructure, geography, weather, culture and traditions (ibid., p.21). Each of these constraints relate to a number of other factors. For

⁴ As aforementioned, this aspect is particularly significant, as smallholders have difficulties to get these services from other sources (Kirsten and van Zyl, 1998, p.555).

instance, Arias et al. (2013, p.20) explains that certification relates to costs, information, organisation and production volume which again relate to actual tangible issues such as extension services, infrastructure investments or storage centres (ibid., p.19). These are acknowledged in the APP 2016-2020 which is an outcome of a comprehensive consultative process with multiple stakeholders like farmer groups, investors, processors, lenders, civil servants and academics (FMARD, 2016, p.4). In a review of the APP, Odunze (2019, p.70) states “that the policy recognizes inherent constraints” to the actors in the sector. It presents 16 themes, such as access to land, inputs, information, knowledge, but also broader aspects such as institutional settings. Levers of each theme are explained in dept within the policy (FMARD, 2016, pp.14–32).

Table 2 Market access determinants

Categories		Determinants		General	Role of the Government
Smallholder characteristics ^a	Resource base ^a	Land ^a			Access to land ^f
		Water ^a			Infrastructure ^h
		Public sector support ^a	Soil fertility ^a		Fertilizer support ^g
			Financial ^b		Credit support ^j
	Technology ^a	Technical efficiency ^a			Extension services ^m
		Knowledge ^a			Equipment distribution ⁱ
		Use of purchased inputs ^a			
	Risk factors ^a	Corruption ^a			Corruption ^e
		Civil conflict ^a			Security ^d
		Prices ^a			Stabilization ^e
Public sector policies ^a			Consistency of policies ^k		
Connectivity to markets ^a	Market orientation ^a	High transaction cost ^a			e.g. infrastructure/ transport ^l , Information ^m
		Storage ^a			Infrastructure/ Storage opportunities ^g
	Produce quality and volume ^a			Certification ^g	
Market functionality ^a	Power relations ^a	Contractual arrangements ^a			Equal access to services ^c
					Policies to balance competition with larger farms ^m
	Institutional setting ^a	Infrastructure ^a			Infrastructure ^l
Legal ^b			Taxation ⁿ		

Adapted from: Arias et al., 2013, p.11. ^a(Arias et al., 2013, p.11). ^b(ibid., p.21). ^c(Jong-sung and Khagram, 2005, p.154). ^d(FMARD, 2016, p.5). ^e(ibid., p.13). ^f(ibid., p.15). ^g(ibid., p.18). ^h(ibid., pp.20-21). ⁱ(ibid., p.22). ^j(ibid., p.26). ^k(ibid., p.27). ^l(ibid., pp.23-24). ^m(ibid., pp.16-17). ⁿ(ibid., p.49).

Table 2 contains the most significant market access determinants for the present work. Since there is a too a wide variety of aspects to consider, the APP was consulted in order to compile a simplification of the concept of Arias et al. (2013, p.11). It allows for the identification of areas involving the state where opportunities for bureaucratic corruption are created.

It can be argued that market participation of smallholders is crucial for improved food security and poverty reduction (ibid., p.5). Nevertheless, it may be doubted that farmers are actually market oriented, as they sell only a rather small percentage of what they produce. However,

Arias et al. (2013, p.5) mention that limited market participation is not necessarily due to a lack of market orientation. This is confirmed in a study by Anderson et al. (2017) in Nigeria, where 89% out of a sample size (n) of 2,502 agreed to the statement: “I want to expand my agricultural activities by looking at new products and/or markets” (ibid., p.22). Furthermore, 71% indicate farming as their primary job (n=5,128) (ibid., p.23) and 90% (n=2,502) want to keep working in agriculture (ibid., p.21). This is an essential insight into the significance of market access for smallholder farmers.

2.3 Bureaucratic corruption

Corruption is a very broad term including various definitions, terms and related offenses. The subsequent chapter will shortly analyse these discussions and conclude by narrowing the scope of this work towards bureaucratic corruption.

Generally, corruption is defined as “the abuse of entrusted power for private gain” (Transparency International, 2020), the “use of public office for private gain” (The World Bank, 1997, p.8), or “dishonest or fraudulent conduct by those in power” (Oxford Dictionary, n.d.). The United Nations conventions, the Organisation for Economic Co-operation and Development and the Council of Europe do not define corruption, but instead establish specific offenses for different corrupt behaviours (OECD, 2008, p.22). These specific offenses can be derived from the United Nations Convention Against Corruption (UNCAC) and include among others bribery, embezzlement, misappropriation, illicit enrichment and obstruction of justice etc. (Hechler, Huter and Scaturro, 2019, p.6). Nigeria is state-party to the UNCAC and active member of the Implementation Review Mechanism (UNODC, 2020a). It is also party to other regional conventions of the African Union and Economic Community of West African States. Nigeria has largely complied with the provisions of the conventions by legislation and the establishment of anti-corruption institutions by successive governments (Hope, 2018, p.509). However, as aforementioned despite these provisions and the deployed laws, corruption continues to be “notoriously persistent in Nigeria” (Ocheje, 2018, p.363).

Concerning the precise definition of corruption this work does not simply use the offenses identified in UNCAC. In the interview guideline and in subsequent chapters this work follows the argument of Johnston (2005, p.31) that corruption is “unlikely to be the same problem everywhere”, or to put it in the words of Graycar (2015, p.88) “Corruption exists in both rich countries and in poor countries, but the nature, extent and overall dynamics of corruption are respectively very different.” For this reason, it seems appropriate to follow a country specific approach such as “A New Taxonomy for Corruption in Nigeria” by Page (2018) which is derived from Nigerian realities (ibid., p.35) and thus delivers an applicable framework for this work. It covers a wide range of 28 corruption tactics summarized under eight categories (ibid., p.1) which are presented in Table 3 with the respective definitions adapted from Page (2018).

Table 3 Corruption categories

Category	Definition
Bribery	Bribery is a consensual form of corruption, which includes or instance, payments, gifts or favours in exchange for improper or illicit benefit.
Extortion	Extortion is the use of threat to obtain a benefit like money, property or services.
Auto-corruption	Auto-corruption is a one-way flow of benefit which involves embezzlement, property misappropriation, salary fraud, and revenue diversion.
Contract fraud	Contract fraud is malfeasance in the context of government contracts.
Subsidy abuse	Subsidy abuse relates to malfeasance related to financial concessions such as subsidies, grants or tax waivers.
Nepotism or favouritism	Nepotism or favouritism relates to providing benefits on the basis of for instance religion or ethnicity.
Deliberate waste	Deliberate waste is the investment in projects which are either abandoned or of little socioeconomic value in order to create opportunities for corruption.
Legalized corruption	Legalized corruption involves legal benefits like excessive pay, land grants or gratuities like allowances etc.

Adapted from: Page, 2018, pp.17–24.

From the Transparency International definition of corruption, a problem arises. As corruption in the public sector already entails a wide range of offenses, the inclusion of private to private corruption may impede operationalization. According to Kurer (2014, p.39) the inclusion of the latter further reduces the chances to determine the attributes of corruption. To focus on violations in public functions may be too narrow but necessary in order to engage in a constructive analysis. Private to private corruption may have essential effects, but mostly affect the businesses themselves, leading to a strong interest of business to engage against this misconduct. Kurer (2014, p.32) further opines that the definitional scope should be restricted “to actions involving public functions – to public office and private–public sector corruption”. However, already in 1980 Musolf and Seidman (1980, p.124) observed that government responsibilities are increasingly vested in “quasi-private, or “quasi-government” organisations. About 40 years later, this observation is made in retrospective in the E4J University Module Series on Anti-Corruption. Within UNCAC “public official” is defined as any person performing a public function⁵. Therefore, corruption related offenses “can be committed by persons working in SOEs [State-owned enterprises] or private companies that provide services with a public nature” (Kiener-Manu, 2019). Referring back to Kurer (2014), it can be concluded that the definition of corruption is broadened, but still differentiated from exchanges of pure private nature.

It still remains to differentiate bureaucratic corruption from political corruption. Amundsen (1999) emphasises the need to differentiate these terms particularly for analytical purposes and differentiates as follows:

⁵ “Public official’ shall mean [...] any other person who performs a public function, including for a public agency or public enterprise, or provides a public service” (UN General Assembly, 2003, p.7).

“[...] political corruption involves political decision-makers [...] at the high levels of the political system [...], who are entitled to make and enforce the laws in the name of the people [...]. Thus, political corruption can be distinguished from bureaucratic or petty corruption, which is corruption in the public administration, at the implementation end of politics.” (Amundsen, 1999, p.3)

This definition may be most beneficial in order to separate bureaucratic from political corruption. After all, considering privatisation and interrelations between politics and administration, it may be argued that this distinction is only due to a normative doctrine (Johnston, 2011, pp.483–484), however, it is certainly necessary to make such a distinction in order not to be tangled up in definitional controversies and to establish a working definition.

To answer the question of which institutions resemble “the bureaucracy”, Anise Ladun (1986, as cited in Aluko and Adesopo, 2003) provides a good insight into possible actors within the Nigerian bureaucracy who may be prone to corruption. The bureaucracy in Nigeria encompasses for instance civil services of all state governments, local governments, the federal civil service, parastatal and public enterprise bureaucracies, armed forces bureaucracy, internal security or police bureaucracy, universities and other institutions of higher education bureaucracy, teaching service bureaucracy, judicial service bureaucracy, public media bureaucracy, political party bureaucracy and private sector bureaucracy (ibid. pp.47–48).

3 Theoretical considerations

The subsequent chapter introduces the basic transmission mechanism of corruption on market access. As corruption can be seen as kind of the “independent variable” which is assumed to affect market access, this is the perspective from which the assumed mechanisms will be explained. Since one theory may not be able to fully capture the effects of corruption (Martins, Cerdeira and Teixeira, 2020, p.3), this work relies on insights from traditional economics, institutional economics and thus transaction cost theory.

3.1 Principal-Agent-Client – the transmission mechanism

In the research on corruption the principal-agent approach provides an opportunity to understand the most relevant transmission mechanisms of corruption on smallholder farmers.

3.1.1 Retail- and strategic level corruption

There are two broad categories of corruption that affect small businesses in Nigeria. The first is the retail-level which describes corruption that occurs as a bottom-up phenomenon, disrupting daily business. This includes extortion connected to licenses, permits, inspections, predatory taxation and customs, as well as police (and “gang” extortion). The second form takes place on the strategic level as a top-down effect. This form of corruption refers to the diversion

of funds and distortion of policy outcomes rendering government assistance ineffective (Page and Okeke, 2019, pp.5–6).

Both categories can be understood in consulting the principal-agent approach. Agency theory, as a problem of various organisations, is used in numerous fields such as economics, sociology and political science (Panda and Leepsa, 2017, p.75). In agency theory, or the principal-agent branch within neo-institutional economic models a relationship between principal and agents in which the interests of the actors diverge. The agent possesses an informational advantage over the principal who can set the pay-off rules in their relationship (Groenendijk, 1997, p.208). Every government has to delegate tasks such as tax collection and policy implementation to the bureaucracy on a daily basis. However, bureaucrats may not conform to the "Weberian ideal" and exploit their position. "Consequently, whenever authority is delegated to a bureaucracy, the potential for corruption is created" (Aidt, 2003, p.635). In the case of the present work, an extended variant of the principal-agent relationship is suitable where a third party, a client, is introduced. Consequently, the "principal [...] creates rules directed at assigning tasks to the agent [...] [, that] are intended to regulate exchange with the client" (Lambsdorff, 2001, p.6). This means there is a government (principal), bureaucrats (agents) and smallholder farmers (clients), engaging in a relationship in which bureaucratic corruption is of interest for this work. Using the previously elaborated variant of the agency theory Szántó, Tóth and Varga (2012, pp.160–161) explain almost in its entirety, the case of what is here defined as retail and strategic corruption on the basis of four forms of corruption. Bribery and extortion may be attributed to retail-, and fraud and embezzlement to strategic corruption. In the case of bribery, the client is the initiator of the corrupt transaction. In return for the bribe offered, the client receives an illicit advantage from the agent – for example a permit that he would not otherwise receive. In the case of extortion, the corrupt transaction is initiated by the agent who uses his or her power to coerce a certain benefit from the client. The latter pays for a service he or she would actually be legally entitled to. In the case of fraud, the agent deliberately increases the information asymmetry vis-à-vis the principal in order to be able to carry out a covert action that generates an advantage. The agent may also conceal information in order to derive a financial advantage, for instance. In the last case, embezzlement or misappropriation, the agent "appropriates the asset or the right of disposal entrusted to her or his care, and disposes of these as her/his own" (ibid., p.161). The authors observe that the damaged party in this case is the principal (ibid.). This work goes a step further and comes back to Page and Okeke (2019, p.6) who state that these diverted funds are also a loss to the small business owners as they miss out on potential benefits. As explained by Lambsdorff (2001, p.32) losses do not occur because of the monetary exchange, but because the principal becomes unwilling or unable to increase public welfare. The benevolent principal, who is committed to public welfare, possesses limited control and thus corrupt actions of agents result in

public welfare losses (ibid., p.2) since the economy does not “produce at its production possibility frontier” (ibid., p.32). Surely, the latter explanations fit into what was previously defined as bureaucratic corruption including the defined private and public actors performing a public function. Two other options may be shortly explained. If the principal (government) is self-seeking and non-benevolent, self-seeking among agents will aggravate and inefficiency will increase. Furthermore, the principal’s favours are sold for a price resulting in inefficient allocation of resources due to for example the wrong choice of projects and the distortion of factor inputs (ibid.). This refers to the government itself which distorts decisions leading to a situation that may be called “inefficiency by design” (ibid.). As the previously elaborated explanations apply for bureaucratic corruption, the principal agent model can be used to explain political corruption as well. In a representative democracy⁶ the electorate can be seen as principal and the government as the agent, who deals with the people’s interests in exchange for votes (Groenendijk, 1997, p.222). This approach seems suitable to partly describe the origin of Nigerian vanity projects, where resources are allocated to such projects rather than to social services due to political corruption (Igiebor, 2019, p.504). Surely these processes do not only include political, but also bureaucratic corruption, since such projects require both politicians and bureaucrats to fail in their “watchdog” duties in order to facilitate rent-seeking⁷ activities (Dahlstrom and Lapuente, 2017, p.9). An aggravated variant of a self-seeking principal can be used to describe the kleptocratic tendencies still⁸ observed in Nigeria (Das, 2018, p.1; Page and Okeke, 2019, p.19). In such a situation, a kleptocratic principal can set constitutional and legal restrictions aside and is therefore able to design a perfect bribery system. Since government decisions are inherently distorted, private investors may be deterred from investment. Consequently, this majorly affects capital accumulation (Lambsdorff, 2001, p.32) which plays a crucial role in the development of the agricultural sector as a whole (Haley, 1991, p.156).

Lastly private to private corruption may also be seen as a principal-agent problem. An employer or a manager may use his or her power or influence beyond his or her envisaged function in a company or organisation (Argandoña, 2003, p.255) in order to exploit his or her mandate, specified in the contract with the principal, in order to gain a benefit for him or herself or a third party to the detriment of the principal. Private-to-private corruption affects the company financially in terms of costs and inefficiencies, legally, like charges or penalties, socially, like loss of reputation or creation of a corruption-friendly environment, and ethically in terms of loss of rules and culture (ibid., p.264). However, the effects extend beyond the company to third

⁶ Following the current classification of Nigeria as a highly defective democracy by the Bertelsmann Stiftung (2020).

⁷ Rent seeking is the idea that large profits go to people without them making an actual (productive) investment (Tullock, 2005, p.93).

⁸ Page and Okeke (2019, p.31) note the striking parallels between the 1980s and today.

parties (e.g. in bid-manipulation) and the society as a whole (atmosphere of distrust) (ibid., p.257).

3.1.2 Exceptions in theory

There are some exceptions to the aforementioned categories, namely independent private actors, vigilantes and the case of favouritism.

3.1.2.1 Independent private actors and vigilantes

From the former observations two entities cannot be so easily explained along the classical arguments of the agency theory, local vigilantes or criminals, as well as independent private entities engaging in misconduct with another such entity. Misconduct of private entities may be considered as either criminal activities, or sharp practices - “a way of behaving, in business, that is dishonest but not illegal” (Cambridge Dictionary, n.d. b). An example for the latter is the supply of substandard seeds by seed companies within the Growth Enhancement Support Scheme (GESS)⁹, in some cases resulting in total yield losses for farmers (Ladele and Oyelami, 2015, pp.80–81). The case of local vigilantes is more complex, as in Nigeria an oligopoly of power is shared between law enforcement, military and vigilantes. The vacuum of state legitimacy created an alternative system beyond justice and law enforcement system which equally draw on public consent to legitimize themselves¹⁰ (Brooks, 2019, pp.218–219). For that reason, this relationship can be seen as principal-agent relationship as well in which the principal are the people and the vigilantes the agent. When they are used by state-governors as happened in Nigeria in the past (Pratten, 2008, p.5), the principal-agent-client constellation could be used to explain the situation.

3.1.2.2 Favouritism as a special case

Favouritism occurs when one person or a group is unfairly favoured in the allocation of (public) resources. It is often used as a means to further political loyalty and can for instance be related to the distribution of public projects, infrastructure, appointments to public functions, or as bribes and advantages channelled through contracts, loans and guarantees to private businesses (Amundsen, 2019, pp.17–18). As can be seen in these explanations, favouritism can itself entail other corrupt practices, or vice versa. In an earlier work Amundsen (1999, p.14) interestingly describes favouritism as insofar related to corruption, that it contains a corrupt abuse of power, but in itself entails a distributional aspect, whereas corruption is characterised as an accumulation of resources. The significance of the latter in the Nigerian context becomes

⁹ The GESS was an initiative under the Agricultural Transformation Agenda (2011 – 2015). Farmers could access inputs at redemption centres via an e-voucher system - fertilizer and seeds were given in private hands (Ladele and Oyelami, 2015).

¹⁰ Beside public consent the state institutions rely on the notion on political legitimacy, whereas the vigilantes rely on rituals, “that speak to the local population in a way that helps legitimize an alternative vigilante system of competing justice” (Brooks, 2019, p.219).

apparent when considering the statement of a commissioner of agriculture: “Who gets to such a position of power and then refuses to help his people? Only the worst kind of person” (Smith, 2010, p.65). The extent of ethnic favouritism is reinforced by over 360 ethnic groups which have “relatively small and tightly knit political classes bound together by deep-seated patron-client, familial, and even marital ties” (Page, 2018, p.22). Thus, the most appropriate modelling of favouritism in Nigeria, would be by amending the aforementioned explanations of the agency theory. Hereby, the principal (voters) and agent (government) relations transform into a patron-client relationship, where the voters turn into clients who deliver votes in return for certain favours or benefits by the patron (government). The system of elections hence becomes a corrupt exchange with the result of an increased adverse selection, incentives for the (clientelist) diversion of resources and the erosion of the citizen’s ability to enforce accountability among public officials. Such officials are elected by the president, ministers, governors or majors (their principals) who often abuse their authority to appoint officials on the basis of patronage which in turn raises the likelihood that bureaucratic service provision and recruitment will be used for clientelist purposes (You, 2015, p.25).

3.2 Sand or grease? – the effects of corruption

Where the aforementioned insights explained the transmission mechanisms of corruption, the effects of corruption are intensely discussed until today.

3.2.1 *A review of the debate*

In the 1960s, it was Leff (1964, p.11) among others who by arguing that bribes could lead to the distribution of licences to more efficient market participants, fuelled an academic debate that is still intensively pursued today. It concerns the question of whether corruption is detrimental or beneficial to growth or in other words, whether corruption acts as sand or grease for the wheels of growth (Nur-tegin and Jakee, 2020, p.11). Revisiting this debate Méon and Sekkat (2005, pp.71–74) contrast the arguments of the two sides. The argument, that bribes can speed up bureaucratic processes is juxtaposed with the idea, that bureaucrats may be incentivized to create delays and thus opportunities for bribe seeking. Efficiency gains by corruption, speeding up cumbersome bureaucratic processes may be offset by the increased number of transactions. The increased quality of civil servants’ services through corrupt payments is contrasted with the incentives created by bribery to create distortions in order to preserve these opportunities. Such options may also serve as motivation to limit new civil servants’ access to key positions. Replicating the competitiveness of business auctions, it was argued that bribes can lead to the allocation of resources to the most efficient bidder. The latter may however be not the most efficient, but the most optimistic, willing to pay the bribe. The ability of the highest bidder to do so, may also be due to the fact that the firm will then compromise on the quality of goods delivered. It was also argued that the quality and quantity of investment is increased

due to corruption, but it was shown that these investments increase in quantity but are allocated to unproductive sectors. The mitigation of business risks by corruption is shown to be offset by the uncertainty and unpredictability inherent to (illegal) corrupt transactions.

Since Mauro (1995, p.683) found that corruption is significantly associated with lower investment and growth, the literature was mostly dominated by the sand in the wheels argument. The grease in the wheels discussion was revived in 2013 (Nur-tegin and Jakee, 2020, p.11), by Dreher and Gassebner (2013, p.427) who, using a panel of 43 countries from 2003 to 2005, find that corruption can contribute to overcome the burden of regulation at market entry. However, the authors also emphasise the neglect of potential negative long-term effects such as officials creating delays to extract bribes and increased stringency of entry regulations with corruption among officials becoming wider and deeper. Most recently Nur-tegin and Jakee (2020, p.11) did an extensive regression analysis based on World Bank Enterprise Surveys and the Afrobarometer 2015. The study takes into account the multi-faceted nature of corruption and the diversity of its impacts by looking at both "grease" and "sand" in the wheels arguments (ibid., p.1). Even though the authors find different results for 40 types of corruption considered, the majority of effects are harmful. This holds particularly true for the more detailed and reliable¹¹ Afrobarometer, where the authors found a majorly statistically significant detrimental effect of corruption on living conditions on all four regression models (ibid., pp.8–11).

3.2.2 Narrowing the debate – the effects on smallholders

The principal-agent theory provided some insight into assumed effects. These are elaborated and extended for a deeper understanding of the assumed transmission mechanisms from bureaucratic corruption to smallholder farmers.

3.2.2.1 The effects of favouritism

Bramoullé and Goyal (2016, pp.16–17) show the effects of favouritism by modelling the situation as a principal agent scenario in which an individual (principal) gets an economic opportunity but needs another individual (agent) to realize that opportunity. The third party, the expert, is the pivot of the situation, representing the market behaviour. His or her treatment determines the outcomes of the predictions. Considering transaction cost, rents and pay-offs an artificial bargaining process among the participants resulted in the predictions that favouritism is a mechanism that diverts surplus towards a small group to the detriment of the society as a whole entailing inefficiencies and negative effects on investment and innovation.

Particularly the case of recruitment is shown by Ponzio and Scoppa (2011, p.80) who model a situation where a principal (the government) in charge of the recruitment process, delegates

¹¹ Nur-tegin and Jakee (2020, p.6) found that the Afrobarometer had virtually no miscoded entries compared to the highly reputable World Business Environment Survey, which had a large number of miscoded entries.

the latter task to an agent (public official), who in turn faces two agents (applicants). The modelled game predicts that the manager (bureaucrat), in exchange for certain favours or benefits, recruits the low-quality worker and thus imposes cost on other applicants as well as the principal. Favouritism is particularly prevalent in high-wage jobs and organisations with low managerial incentives, low skill-responsiveness to productivity and an environment with strong family ties that also facilitates covert payments. In bureaucracies such practices do affect productivity, efficiency and management of resources. In fact, it creates a detrimental vicious cycle, where people with a positive predisposition to bribery are recruited again and again (UNODC, 2019, p.64) which in turn affects service provision within the resource base (Arias et al., 2013, p.11) of smallholders.

3.2.2.2 The strategic level – redistribution and lost opportunities

The effects of strategic level corruption are a general distrust in the government, or government programmes as well as – as aforementioned - lost opportunities for job and welfare creation, due to the failed government assistance programmes (Page and Okeke, 2019, p.5). From the macro-perspective corruption is considered as a general hindrance to redistributive measures of the government. In a comprehensive regression analysis Gupta, Davoodi and Alonso-Terme (2002, pp.478–479) find that a worsening of the corruption index significantly increases the Gini coefficient. Additionally, an increase in the growth rate of corruption significantly reduces income growth for the poor. The authors conclude that corruption affects resource allocation, economic stabilisation and the income redistribution – the core functions of the government. In a dynamic equilibrium model Blackburn and Forgues-Puccio (2007, p.1538) observe that inequality is higher and growth lower in a corrupt environment. In the model appointed bureaucrats are responsible for the implementation of redistributive programmes. The authors observe that the level of subsidies is reduced, tax evasion is enabled and savings depressed in a corrupt environment. In a later similar modelling approach¹² Blackburn, Bose and Haque (2011, p.425) extend these explanations by observing a distortion of public expenditures – both in quantity and quality. Expenditures are inflated as well as directed towards low-quality goods. Thus, the effects of strategic level corruption on smallholder farmers, small businesses and more generally – the poor – aggregate in a crucial hindrance to redistributive measures such as assistance programmes as well as a tendency towards the provision of low-quality goods. This significantly constraints the resource base of smallholders (Arias et al., 2013, p.11) and supports the aforementioned assumption that the damaged parties are the principal as well as the client.

¹² They model an economy with government intervention, accumulation of capital as well as bureaucrats responsible for the procurement of efficiency enhancing public goods (Blackburn, Bose and Haque, 2011, p.405).

3.2.2.3 *The retail-level – transaction cost and taxation*

Textbook economics represent a first starting point to explain the effects of corruption. Here it is assumed, that a non-neutral tax, always entails market distortions, since economic decisions are distorted. In reality taxes are never neutral and entail changes to economic decisions which are assumed to result in a deadweight loss (Case, Fair and Oster, 2012, p.402). What differentiates corrupt payments from taxation is that the transaction costs are much higher due to uncertainty and secrecy (Shleifer and Vishny, 1993, p.612). Transaction costs arise from problems of information asymmetry, property rights as well as conflict of interest already described in the principal agent case. The resulting cost of exchange are aggregated under the expression “transaction cost”. Transaction cost relate to search-, screening-, bargaining-, transfer-, monitoring- and enforcement cost. The origin of such costs in the context of commodity trading majorly stems from uncertainties, problems of enforcement, lack of knowledge and constraints to the transfer of goods¹³. Therein, bribery and corruption costs are listed as transfer costs (Jaffee, 1995, p.30). The corrupt transaction can either be a market- or parochial corruption¹⁴, whereas the former relates to a relatively transparent, institutionalized form of impersonal and (mostly) petty corruption with a high number of alternatives and the latter refers to situations with fewer alternatives, personal connections and (mostly) large transaction sums (Husted, 1994, pp.20–21). Particularly this kind of situation includes a risk of denunciation even after the contract fulfilment and therefore the required concealment and enforcement mechanisms sharply increase the transaction costs of the corrupt transaction (Lambsdorff, 2002, p.238). Husted (1994, p.19) emphasises the uncertainty and inability to plan with respect to such transactions (under the assumption of bounded rationality). Moreover, opportunism is an inherent problem in a corrupt transaction which takes place outside the law and offers a variety of opportunities for personal benefit by systematic distortion of information.

Referring to such higher transaction costs Fisman and Svensson (2007, pp.63–64) provide empirical evidence based on a regression analysis of the relationship of taxes, bribery and firm growth in Uganda. The observed three percentage points reduction in firm growth associated with a one percentage point increase in the bribe rate is about three times larger than that of taxation. Based on the aforementioned explanations, it can be concluded that corrupt transactions involve other and most importantly higher aggregated cost than tax payments. Particularly important for the present work is that these high transaction costs arise from the engagement in market activities. Therefore, they are crucial to the decision to enter a market or engage in a transaction and are one of the major determinants of market orientation and hence connectivity to markets (Arias et al., 2013, p.11). Furthermore, Zhou and Peng (2012, p.911)

¹³ See Jaffee (1995, p.30) for detailed examples of transaction costs in commodity trading.

¹⁴ Husted (1994, pp.20–21) uses this distinction to refer, within the concept of human asset specificity, to the idiosyncratic nature of transactions, requiring particular knowledge, relations and organisation.

assume, that small firms may be more vulnerable to rent-seeking by officials, due to their weak bargaining power. Additionally, due to their restricted resources, these activities drain a larger share of monetary resources from their financial assets compared to their large-scale counterparts. Thus, while small firms are forced into paying bribes, large firms may engage in bribery for favourable treatment by officials. Relying on a sample of 2,686 firms in 48 countries from the World Business Environment Survey the authors confirm that hypothesis finding that bribery hinders small firms, but not their large counterparts (ibid., p.917). Based on a sample of 21,250 firms from 117 countries, Martins, Cerdeira and Teixeira (2020, p.29) support these findings concluding that the negative impact of corruption is attenuated for large firms but not for small firms.

4 State of research

Before proceeding with the empirical part of this paper, it is appropriate to briefly review the current state of research. An insight into market access should therefore give a short overview of related research in the Nigerian context before proceeding to the topic of corruption.

4.1 Market access

Adeoye and Adegbite (2018, p.10) conducted a small (n=97) survey among plantain farmers in Osun state. The identified constraints include inadequate transportation and bad roads (94%), distance to markets (89%), inadequate access to market information (75%), non-membership of market association (73%), quantity harvested (72%), pests and diseases (68%), inadequate input supply (65%), land tenure problem or access to land (55%), poor extension services (50%), low unit price 45% and educational level (41%). Nwalem et al. (2016, p.1), conducted a survey among 372 sesame farmers in Benue state. The respondents report lack of information (93%¹⁵), seasonality (84%), poor storage facilities (81%), cost of transportation (64%), high taxes (56%), distance to market (45%) as well as bad road (42%) (ibid., p.5).

Although rather small, the different results of these studies are striking. One possible explanation for this might be the different locations. Oparinde and Daramola (2014, p.70) conducted a study in Ondo state among rural (n=40) and peri-urban (n=40) maize farmers. In the frequency ranking, the first three constraints for rural farmers are insufficient capital, poor road network and price instability. Peri-urban farmers identified poor road network, inadequate agricultural inputs and high cost of transportation. High differences in frequencies, to be found in brackets¹⁶, were observed in high transportation cost (25/37), insufficient processing facilities (22/10), price instability (38/20), inadequate agricultural inputs (20/40), land tenure (3/15) and

¹⁵ The percentages are calculated from the total frequencies provided by Nwalem et al. (2016). They are rounded to whole numbers.

¹⁶ The numbers in brackets can be understood as ("frequency of rural "/"frequency of peri-urban).

long distances (25/10). The highest agreement was on poor road network (40/40), insufficient capital (40/35) and weather-related issues (35/34)¹⁷ (ibid., p.77). Adepoju, Owoeye and Adeoye (2015, p.396) collected questionnaires from 120 pineapple farmers in Osun state and rated constraints based on a severity score. The top ranking was bad roads, followed by inadequate storage facilities, low level of government support, high cost of transportation, long distance to market, high level of dependant, low crop income, inadequate access to credit facility (ibid., p.400).

4.2 Corruption

Since the related publications in the literature are quite different with regard to their focus and aim, this section was separated according to an introduction to the issue of corruption in agriculture, followed by a section on prevalence and extent of corruption in Nigeria. Lastly, research on government programmes and extortion on road is reviewed to account for retail and strategic level corruption.

4.2.1 *Corruption in agriculture*

Fink (2002, pp.1–5) observes that multiple titles, informal land rights, cumbersome registration, donor programmes and the government involvement in parastatals and marketing boards offer opportunities for corruption. The same applies for government contracts which result in poor quality, high prices or even undelivered goods. The payment of bribes affects the allocation of subsidized credit as well as procedures for standards, certification, licensing and permissions. Furthermore, water allocation is affected by rent-seeking through political soliciting. Lastly, he concludes that privatization may create the same problems observed in the public sector. This contribution mostly relies on exchanges and discussions (ibid., p.1), but can be seen as an interesting starting point. Whereas the latter was fairly broad and general, more insights may be gained by Moris (1991, p.86), who describes the forms of corruption usually encountered in field administration in Africa. What he describes as almost universal, is the purchase of products, or services at low price, the appointment of relatives and clansmen and the private use of vehicles, fuel, water, electricity, government farms and facilities. Furthermore, he lists, extortion on roadblocks, diversion of equipment, bribes for permits, negotiable sale of public assets to cronies, contracting with shadow partners, extra payments for clearances and approvals and bribes by contractors in government projects.

4.2.2 *Prevalence and extent*

In 2019 a comprehensive study on petty corruption in Nigeria was conducted by UNODC

¹⁷ Others were: “poor storage facilities (30/32), lack of credit facilities (20/20), problem of pests and diseases (17/15), scarcity of labour during peak farming activities (17/13), inadequate extension services (10/10), fire outbreak (5/3), flooding (3/5) (Oparinde and Daramola, 2014, p.77).

(2019, p.15)¹⁸ which found that the national prevalence rate¹⁹ of bribery in the public sector²⁰ was 30.2% with a frequency of one bribe per two months. The contact rate²¹ with public officials was 72% in urban and 59% in rural areas (ibid., p.22). Interestingly, direct, indirect and third-party requests accounted for 60%, 20% and 3% respectively (ibid., p.31). Among the most recounted reasons were speeding up (38%), fine- (21%) and cancellation avoidance (12%) (ibid., p.36). The most common service sought when paying a bribe were public utility services with 26% (ibid., p.9). The highest contact rates were recorded for public utility officers (31%), medical officers (31%) and police (30%), with a bribery prevalence rate of 22%, 7% and 33% respectively (ibid., pp.41-42). Of the total number of bribes paid in 2019, 55% goes to police officers (35.7%) and public utility officers (19.3%) alone (ibid., p.45). Concerning inequality, the study found that Nigerians with tertiary education reported bribery cases almost twice as much as people with no formal education. However, those without formal education, who paid a bribe, had a higher average number of bribes over the last 12 months (7.1 vs. 5.5) which points towards a series of small bribes paid (ibid., p.56). Justesen and Bjørnskov (2014, pp.11–14) doubt that, education alone could serve as a strong indicator for poverty. With the use of several other variables (employment, association member etc.), relying on Afrobarometer data from 18 countries, the authors find that the poor are more prone to experience bribery by street level bureaucrats. Compared to the wealthy, they heavily rely on public services while not being able to afford expensive exit options (e.g. use private schools and health care).

Abiodun et al. (2017, pp.1275–1276) surveyed 140 farmers using fertilizer in rural Kwara State. They found that 30.99% of farmers sourced fertilizer from the open market and 66.91% from government accredited agents. Furthermore, 35.23% of the respondents found favouritism and 54.93% nepotism to be affecting fertilizer distribution. UNODC (2019, p.65) used a number of proxies to identify the occurrence of nepotism. In Nigeria all public officials should go through a competitive written or oral test in order to be recruited. 40% of the respondent did not go through this procedure. Of those who successfully completed the test 23% used nepotism and 16% nepotism and bribery in order to land the envisaged position. For public services, the effect was tested through enquiring about the access to requested documents. Here, the large majority (81%) of applicants (7%) received the respective document. However, among the people who did not follow the official procedure 14% resorted to nepotism, 20% to nepotism and bribery and 17% to bribery as compared to the people who followed due process with

¹⁸ Household survey with more than 33,000 participants and 900 interviews (UNODC, 2019, p.14).

¹⁹ Prevalence is calculated as the number of respondents who experienced bribery or extortion in the 12 months prior to the survey as a percentage of all adult Nigerians who also had contact with the same type of public official (UNODC, 2019, p.15).

²⁰ Private to private corruption had a prevalence of only 5.7% (UNODC, 2019, p.21).

²¹ “The contact rate corresponds to the number of adult Nigerians who had at least one contact with a public official in the 12 months prior to the survey, as a percentage of the adult Nigerian population.” (UNODC, 2019, p.22).

14%, 8% and 6% respectively (ibid., pp.67–69).

The aforementioned data was also processed differently by UNODC (2020b, pp.1–2), who point out various gender differences concerning different kinds of corruption. Generally, women seem to be less involved in corruption and female public officials are less likely to seek bribes than men. For instance, vote-buying was less likely for women compared to men in rural (19.4% vs 23.9%) as well as in urban areas (17.5% vs 21.0%) (ibid., p.34). The study also pinpoints perceptions on nepotism which show that a large percentage opine that nepotism is very frequent (men: 56%, women 54%), or fairly frequent (men: 29%, women 28%) (ibid., p.38)

4.2.3 Government Programmes

Among the various programmes affected by corruption described by Page and Okeke (2019, pp.23–25), the Cassava Bread Initiative is probably the one that offers the most interesting insights into how corruption affects government programmes. Since 1982, there have been attempts to promote bread production with a share of locally produced cassava which were riddled with corruption and mismanagement. The promise to connect farmers with buyers was hindered by politically motivated and inflated contracting. By mid 2000s, without an absorbing value chain caused by unreleased funds, this even resulted in a glut in production. The revival of the scheme in 2012 allegedly never reached the farmers, ostensibly due to the diversion of funds through consultants as proxies for officials. Another such attempt after 2016 has so far brought almost no benefit, with only one-sixth of the promised funds released. Furthermore, in addition to the use of consultants already mentioned, 3000 fake farms, many of which belong to fake agricultural associations, are allegedly used to embezzle funds in the Federal Capital Territory alone. Another insight into diversion of funds is delivered by Banful and Olayide (2010, pp.6–7) who used 44 in dept interviews on the issue of subsidized fertilizer distribution. Agricultural Development Programme (ADP) officials and farmers in Edo state strongly believed that fertilizer was diverted, while the officials from the ministry of agriculture disagreed. Reasons for delayed fertilizer included bureaucratic processes, contracting with ineffectual companies and following of the northern agricultural calendar – irrespective of regional differences.

The GESS is a e-voucher based input distribution system which commenced under the Agricultural Transformation Agenda in 2011. The programme was able to effectively curb corruption in the distribution of fertiliser throughout the scheme (Amurtiya, Karniliyus and Chinda, 2018, p.784). The number of targeted beneficiaries range from 20 (ibid.) to 12 – 14 million (FMARD, 2016, p.7). Still Lawal et al. (2015, pp.47–48) found that more than half of their respondents (n=187) perceived corrupt practices in the distribution. Notwithstanding this, the authors stress the increased access to inputs derived from the programme²². The APA

²² For further information on the benefits please consult: Uduji, Okolo-Obasi and Asongu (2019).

envisaged an improvement regarding a variety of shortcomings (FMARD, 2016, p.39), but did not cover the basic problem of the lack of mobile phones among smallholders, particularly observed for 88% of non-GESS-participants (n=600) in (Uduji, Okolo-Obasi and Asongu, 2019, p.354). Despite its previous wide coverage, there is a lack of information about what happened to the programme after 2015. It seems to be still in place, since there are reports about pilot studies on improved technologies (Grossman and Tarazi, 2014, p.8). However, there is a lack of data on beneficiaries, or possible scaling up of the programme.

In the case of Nigeria, Ladele and Fadairo (2013, p.45)²³ utilized random sampling in 3 states (n=148²⁴) among ADP beneficiaries to investigate corruption as an impediment to the transformation of smallholders to agribusinesses. The majority of farmers (60.8%) disagreed that the ADP services were provided at the regulated price and also confirmed (53.4%) that the supplies were given to persons other than the expected beneficiaries. Only 21.7% indicated, that officials sometimes demanded gifts or money for services. While particularly referring to the significance of access to finance for smallholders Ladele, Oyelami and Balogun (2015, pp.31–32) investigated sharp practices in credit allocation, through the collection of interviews and questionnaires from 110 beneficiaries and 25 officers of the Bank of agriculture. The beneficiaries reported occasional unfair treatment of credit applicants due to favouritism (24.5%), bribery as grease payment (27.3%), bribery for illicit credit access (15.5%) undue preference (28.2%), misappropriation of funds (19.1%) and extortion (11.8%). The majority indicated that they never observed such cases, but for all instances a low percentage indicated, that this was always observed (particularly grease payments: 11.8%). The officers reported several kinds of sharp practices. Particularly important²⁵ for the present work is occasional lobbying (56%), through which farmers may be able to apply for a credit due to their personal connections and “occasional” (16%) as well as “always observed” (16%) bribery for illicit credit access. Another interesting insight into official corruption is provided by Fadairo and Ladele (2014, pp.1–3), who observe that among a sample of 174 officials, the majority (52.3%) had a favourable attitude towards corrupt practices, for example influence peddling (89%) and patronage (78%). However, for instance abuse of office (72%) and bribery (67%) were seen as unfavourable. The latter studies mostly refer to government programmes involved in resource provision (Fadairo and Ladele, 2014, p.41; Ladele and Fadairo, 2013, p.32), or public service provision as mentioned in Arias et al. (2013, p.11). Keeping in mind the relevance of such services for smallholders, the extent of impacts on market access seem to be considerable.

²³ The authors rely on data from Fadairo PHD's unpublished PHD thesis (Ladele and Fadairo, 2013, p.48).

²⁴ The sample size was actually 152 but only 148 were processed (Ladele and Fadairo, 2013, p.45).

²⁵ The highest numbers were recorded for sharp practices with minor relevance to the present work such as credit diversion from the farmers side with 68% (occasional) and 20% (always) (Ladele, Oyelami and Balogun, 2015, p.39).

4.2.4 Extortion on the road

The aforementioned case of roadblocks is another phenomenon to consider. These checkpoints are set up 5 to 10 km apart and manned by a variety of security personnel such as army members, police officers, vehicle inspection officers, immigration officers or customs. Officers often transgress their legal powers, or areas of jurisdiction, and usually threaten to search for violations of law. These violations can be numerous and in reality, it is very likely that the officers will find something. Even if they do not have jurisdiction, a bribe is usually paid to avoid long delays. Drivers are reluctant to complain, especially because of the imbalance of power, and pay because they know "one way or the other, they are bound to lose" (Laminu Mele and Mai Bello, 2007, pp.440–441). These official and unofficial checkpoints were found to be an integral impediment within the value chains of tomatoes, onions and chilis in Nigeria, due to the uncertainty of delivery and particularly due to the increased spoilage caused by these delays on the key corridors of the value chains (CBI, 2020, p.25). One of these, the 700km Kano–Lagos corridor, typically includes 15 to 23 roadblocks. Twenty percent of travelling time is spent at roadblocks. Of the total travelling cost, 40% were found to be payments unrelated to any service provision, just to ensure passage (Maur and Shepherd, 2015, p.80). An insight into such frequencies of checkpoints is provided by Human Rights Watch reporting one every six kilometres in Anambra State, every seven kilometres in Enugu state, but only three on a distance of 165 km in the northern state of Kaduna. There were little attempts to hide extortion, with one police officer extorting at gunpoint (HRW, 2010, p.30).

5 Methodology

To answer the research question, 12 expert interviews were conducted. These were processed and summarised according to Mayring's (2014) qualitative content analysis. The method will be briefly explained subsequently.

5.1 Methodical review

In the explorative phase of this research, various methods were considered. The decision to choose a qualitative method was made on the basis of the research objective which developed over time. The research question and its explorative character were chosen on the basis of the intention to fill the gap between the rather broad conclusions on agriculture and corruption by Fink (2002) and the solely public service-oriented contributions of Ladele and Fadairo (2013), in order to compile a more comprehensive picture concerning bureaucratic corruption and smallholders' market access. With the perceived gap in the literature it did not seem feasible to engage in a quantitative analysis on the frequency and extend of a problem (Hennink, Hutter and Bailey, 2019, p.16) which did not even seem to be fully characterized. Instead the research question aims at a contextualized understanding and investigates how something happens and what the process is on accordance to what is described by Hennink, Hutter and Bailey

(2019, p.16) to be characteristic for qualitative research. The authors discuss three qualitative research methods, in-dept interviews, focus group discussions and observations (ibid., p.41). An observation seemed difficult, as corruption is illegal and so it was not likely to obtain any information besides maybe street level extortion. Focus group discussions could have been beneficial. However, using the internet for that purpose would have been difficult mostly for technical reasons. In order to gain comprehensive knowledge on the research question, in dept interviews seemed to be most fertile, whereas it is also most appropriate for sensitive issues (ibid., p.41) as is the case in this work. Gläser and Laudel (2009, p.44) separate qualitative evaluation methods in free interpretation, sequence-analytical methods, coding (grounded theory) and content analysis. The latter is different to the others in two regards. First, the text is processed separately from the original transcripts. Secondly, the category system is developed before the analysis and can be adapted thereafter (ibid., pp.46-47). The present work bears certain characteristics of a reconstructing investigation, focussing particularly on the process that brings about the investigated effect (ibid., p.69). The structured extraction of expert knowledge on the basis of qualitative content analysis seemed the best option following Gläser and Laudel (2009, p.47) in their opinion, that this method is particularly applicable to reconstructing investigations and expert interviews.

The methodology of Mayring (2014, 2015) used in this work is criticised for instance by Flick (2009, p.328), who opines that the theory-based categorization of text may strongly restrict the view on the text contents. Gläser and Laudel (2009, p.199) furthermore find that the standardisation and analysis of frequencies obscure possibilities to extract complex information and suggest a more open approach, in order to allow unforeseen information to be included. However, in this work it seemed suitable to use a relatively structured theory-based approach in order to capture the effects of a variety of corruption tactics which might otherwise be neglected. The certainly necessary and essential openness suggested by Gläser and Laudel (2009, p.199) needed to be considered which is why this work used a combination of inductive and deductive approaches in the form of a content structuring by Mayring (2014, p.104).

5.2 Definition of the text material

According to Mayring (2014, p.54) the general model of qualitative analysis starts with the definition of the material. The latter was obtained from expert interviews which were conducted for the partial completion of a master module. The experts were contacted on the basis of their working experience in relevant organisations (firms, public agencies etc.) and/ or on the basis of their publications and thus assumed expert knowledge. For this purpose, an extensive online research was conducted after which the potential interview partners were contacted via email, social networks or both. Some contacts were also initiated on the basis of recommendations with respect to publications, expert knowledge or professionals. The characteristics, decisive

for the selection of the respective interviewee can be derived from the interview headers in Annex IX. The form of the headers is explained in Annex VIII. The circumstances of origin (ibid., p.57) vary significantly between the interviews. They took place at different times and places, but were all conducted online. The effects of such differences in time, place and context are partially recorded in the transcription headers, in order to provide knowledge on the quality and atmosphere during the call. All interviewees received a declaration of consent for the processing and collection of data beforehand, where they also had the option to let themselves be anonymised. The declaration and anonymisation helped to relax the atmosphere, giving the opportunity for preparation and providing some safety and privacy assurance. The large majority of interviewees seemed relaxed and willing to speak freely. A tremendous contribution to making this possible was to send the interview questions to the interviewees in advance. The formal characteristics of the material (ibid., p.57) included Skype, Zoom and WhatsApp calls, which were recorded by Windows 10 Voice Recorder, OBS Studio and Sound Recorder Android 8.1.0. Recordings were conducted simultaneously, in order to compensate for technical errors and issues related to the sound quality of the recordings. The interviews were brought in written form according to a version of “smooth verbatim” (ibid., p.45). The difficulty that a substantial alteration of the original material can take place at this stage (ibid., p.58) is accounted for in a detailed justification and explanation in Annex VII. Briefly, it should be noted here that the interviews were transcribed as smooth verbatim for several reasons, the most basic of these is the assumed irrelevance of non-linguistic utterances to the analysis of expert knowledge. In order to address the eventuality that they do become important, basic content-bearing non-linguistic utterances were transcribed.

5.3 Question of the analysis

Considering the direction of the analysis (ibid., p.58), the objective of the interviews was the extraction of expert knowledge in order to answer the research question. The written form of the interviews is used to extract the transmission processes, locations of such occurrences and effects of bureaucratic corruption on market access of smallholders. Following the principle of theory-oriented differentiation of the problem and differentiation of sub-issues (ibid., p.59) the “independent variable”, bureaucratic corruption, was separated into several sub-questions in order to arrive at conclusions. Each corrupt practice by Page (2018) was transformed into a question in order to understand the aforementioned effects and processes. The preceding theoretical considerations on corruption and market access, which have already been explained before, allowed a focus on the independent variable of the research question. This is possible, since the theoretical considerations and observations made in the literature on market access identified corruption as a problem within market access. The problem before the drafting of the interview guideline (Annex II) was the presumed disagreement regarding the definitions of corruption and market access. The interpretation of both terms was briefly

explained in advance. Several opening questions were intended to assist in the “brainstorming” of the extensive topic of market access, to capture own thoughts on the research question and to be able to build on these questions in the course of the interview. It also seemed appropriate to ask about the direct and indirect effects of corruption. This was based on the previous theoretical considerations in which these dimensions were already evident. It was also necessary to consider the problem of relevant private actors. Thus, after the first interview, a reference to private corruption was included in the introductory text in order to draw attention to this issue. Secondly, another relevant amendment, was the word “affect” (e.g.: how does bribery affect market access...) which was replaced with “shape”, in order to make the questions more neutral. The interview guideline included two questions on the consent concerning the data declaration and willingness to start the interview under the agreed conditions and one question, where the interviewee was asked to introduce him or herself. The introductory questions concerned the interviewees perception on market access determinants, bureaucratic corruption and market access as well as the identification of relevant situations, where corruption plays and direct or indirect role for smallholders. Subsequently, eight follow up questions enquired the aforementioned forms of corruption by Page (2018) explained in Table 3. Here the problem arose, that the terminology might not be entirely clear and of course the basic requirement for an interview guideline are understandable questions. The solution to this problem is the platform-question. The platform consists of one or more sentences which explain a common knowledge base and is followed up by a simple question (Gläser and Laudel, 2009, pp.140–141). An example is “auto-corruption is a one-way flow of benefit and involves embezzlement, property misappropriation, salary fraud, and revenue diversion” (Annex II). The danger is surely to give an incentive to talk exactly about these specifically mentioned examples. However, the same danger can be observed, when simply asking for embezzlement. The expert is assumed to know about the “examples” (common knowledge base) and auto-Corruption is simply the description of the corrupt practice describing the already known practices. On a simple question about the effect of the respective corrupt practice on market access follows another optional question on the prevalence and frequency of the situations described by the interviewee. The latter question can be considered as an incentive to further engage in the discussion on the corrupt practice of interest in case the collected data was still not satisfactory.

5.4 Analysis technique and concrete procedure model

The analysis technique for the present work is the content structuring by Mayring (2014, p.104), who suggests a combination of inductive and deductive procedures for works, where the themes are fixed in advance, for instance by the interview guideline, which is the case in the present work. However, the combination of inductive and deductive procedures leave room for an adaptation of the categories. In a first step, themes, corresponding categories and a coding guide are developed, followed by deductive category assignment. The second step is the

extraction of the coded passages and the summary per category. If the material per category seems to be extensive, the category system can be inductively adapted (ibid., p.104). Mayring (2014, p.96) suggests a seven-step procedural model for the deductive category, which are assignment research question and theory (1), definition of the category system from theory (2), definition of the coding guideline (3), first material run through (4), revision of categories and coding guideline (5), final run through (6) and analysis (7). Thus, the inductive adaptation particularly concerns step five, where the created categories are included in the coding guideline.

5.5 Definition of content analytical units

Before the coding takes place the content-analytical units have to be determined. The coding unit represents the smallest text component to be assessed and assigned to one category (ibid., p.51). In the present work, the coding unit cannot be smaller than a full sense structure. This structure should be defined as key words, responsible for category assignment, that are characterised by further descriptions. A single word without characterisation or explanation cannot be coded. The context unit, the largest text component to be analysed (ibid., p.51), shall be defined as a full sense structure, whose extent is only restricted to the actual sense structure. This means, that the largest share of text to be coded should be a contiguous explanation of a phenomenon, or phenomena falling into a category. When another explanation outside the defined category occurs, the coding section is ended. Should the section be connected and explanatory to the category, the respective part of the text can be coded within the respective category as well. Thereafter the respective text part can be assigned to another category as well. The recording unit represents the share of text, that is confronted with categories (ibid.), or which parts of the text are evaluated in succession (Mayring, 2015, p.61). The whole transcription is evaluated category by category. This was meant to identify the variations of categories and potential opportunities for inductive category adaptation. Thereafter the categories are processed within single interviews in order to allow observations about shared opinions and observations.

5.6 Analytical steps

After the content analytical units are defined, the coding, according to the coding guideline can take place. This includes the category label and definition, anchor example as well as coding rules (Mayring, 2014, p.97). The deductive categories were formed according to the questions directly derived from the eight categories of corruption by Page (2018) (see chapter 2.3). For the inductive revision of categories, the model of Mayring (2014, pp.82–83), may be followed. He refers to the summarizing content analysis for the single steps of the formation of inductive categories. Herein a table is created with columns for case, page, paraphrase, generalisation and reduction (ibid., p.70). This table was slightly amended. To ensure traceability the columns include the respective category, the interviewee, the number for the paraphrase and the line

numbers of the respective paraphrase instead of only case and page number. The same table is used for the aforementioned extraction of coded passages. Mayring (2015, p.119), clarifies this part by stating that, if a summary of codes should follow after the coding, this shall be conducted according to the rules of the summarizing content analysis. Thus, the concrete procedure model includes another four steps after the sixth step of the structuring analysis. In the first of the latter, paraphrasing, all text components with limited or no relevance to the content should be deleted. The text passages that are significant for the content should be reduced to a linguistic level (e.g. translation) and to a grammatical short form. In the next step, these should be generalised on a predetermined abstraction level. In the case of this analysis, this level of abstraction is defined as follows: The statements should contain all relevant aspects with regard to the assigned category, while the underlying message of the speaker must be preserved. The context is to be retained, if necessary for the retention of these underlying messages, but reduced to the necessary minimum. Here, the rule of using the theoretical pre-assumptions as assistance in cases of doubt is applied, if necessary. This also applies to the next step, the first reduction, in which identical passages are deleted, unnecessary parts of the text are removed and sections that carry meaning are transferred. In the last step, a second reduction is carried out in which paraphrases with the same or similar content are bound and paraphrases with the same or similar referent and different statements are integrated or constructed into a new statement (Mayring, 2014, p.68).

6 Empirical results

In the following chapter, the empirical results are presented. They refer to the summary tables in Annex I. Reference to the respective passages are made with P (participant), n (number of participant), nnn (number of quote). The references are always located at the end of a certain statement. The contributions of the interview partners are summarised with regard to the previous sense structure of their statements. This system was applied to prevent interviewer comments from being wrongly contextualised in the later analysis, independently of the original transcript, as this would entail a serious risk of arriving at the wrong conclusions. The chapters are assigned C.10, C.2 etc. due to the categories they relate to. Since C.10 describes corruption at a general level, it was placed at the beginning. Any possible contradictions in the data are discussed in chapter 11.

6.1 Corruption general - C.10

“It is believed that” corruption is a major impediment to economic, political and infrastructural development in Nigeria (P4, 203). Bureaucratic corruption is the most common form of corruption (P4, 202). It can be divided into three levels. Large-scale embezzlement and diversion of funds that occur due to a lack of transparency and accountability can be attributed to the strategic level. This could be, for instance, large schemes to support commercialisation projects in

agriculture. The implementation level is called the operational level. This can be at the level of management of the implementation of training and loan programmes involving, for example, fake farms or agricultural trade organisations. The lowest level is the tactical level, where interpersonal interaction with farmers takes place. This includes tactics such as ad hoc taxes, extortion, bribery, etc. (P12, 218).

Auto-corruption, legalized corruption and deliberate waste affect the overall market picture through high opportunity costs. The programmes could have a positive effect on smallholders' market access if they were implemented properly. For example, the cassava bread programme, which does not achieve anything but continue to function as a source of salaries and stipends etc. In addition, as this has been a problem for years smallholders lose confidence and are therefore unlikely to participate in these programmes (P12, 221). "The Nigerian government does not see the governance as a contract they see it as a right and they see it as an avenue for enrichment". Thus, state funds and revenues from the exploitation of natural resources are embezzled. The political elite does not provide for the necessary infrastructure, whether roads, railways, airports or even electricity and water (P4, 204). Every year the government reserves hundreds of millions for programmes. However, there is no impact evaluation or even information about the activities carried out under these programmes such as those for the promotion of various crops and for the development of smallholder value chains. Particularly within the latter there seem to be no activities, hindering farmers from new value addition (P8, 215).

The main problems for farmers are the capacity of the state and the lack of access to finance due to institutional failures and corruption. These inefficiencies affect funding for farmers, for instance storage opportunities and road infrastructure (P9, 216). P11 witnessed a project, where rice farmers should have been supported in the process of land preparation, including provision of tractors and organisation of clusters. The project was not implemented even though the money was released (P11, 217).

Bureaucratic corruption affects the market access of smallholders at several levels, both direct and indirect. Whatever applies to any actor in the value chain also affects the smallholder farmer. These actors, essential to identify how and where corruption affects smallholder farmers along the agricultural value chain, include agricultural input dealers who supply the inputs used by farmers; tractor hiring services and other farm implement providers who supply tools for mechanisation; actors in produce markets and credit provision; agricultural research for innovations and improved practices to increase productivity; agricultural extension services that convey knowledge about technologies and innovations; farm associations and cooperatives; transportation and communication facilities (P6, 208).

Only few smallholders actively participate in markets. Those who participate are the wealthier

ones, who possess a competitive advantage, due to comparably less transaction cost, better market access and control of the market structure. Facilitated through corrupt practices they can better access support services such as tractors in local government areas. They are better positioned to receive such limited services through favouritism, bribery or other forms of corruption, which in turn strengthens their position (P5, 206).

One of the direct effects of bureaucratic corruption is the poor road network and other rural infrastructure (P6, 208), where projects are awarded but not implemented (P6, 210). So, policies and connected projects for farmers are not implemented because “something” happens to the funds (P6, 211). Additionally, by not using or deploying security funds appropriately, the security situation for farmers, especially in the case of the herdsmen brutality, is compromised (P6, 212).

Salaries for civil servants are insufficient and thus corruption is everywhere and inevitable (P7, 214). The latter also accounts for the education sector, where corruption is likely to increase (P4, 204). You can find corruption like favouritism and extortion in every sector where the state is involved (P4, 205). When officials engage in bribery and other such practices it affects the farmers’ ability to produce and ultimately their ability to ensure food security (P6, 213). Additionally, since most Nigerian smallholder farmers live in abject poverty, they are very vulnerable to any sort of bribery or extortion (P12, 221).

6.2 Market Access - C.1

Due to the lack of social protection and working from year to year, it is essential for smallholders to keep their overhead costs low and monetise even small proportions of their harvest. Even small margins in, for instance transport, or labour cost make a huge difference to them, their family and the community (P12, 36).

They are confronted with a lack of physical market access (P6, 9) movement of goods, road access (P.1, 1) and the availability of basic (P2, 3), or suitable (P11, 28) (market) (P1, 1) infrastructure. Since most farmers live in rural areas with severe infrastructural deficits, the transport of goods is fundamentally hampered (P2, 3). Roads are little more than footpaths (P5, 8), mostly not motorable (P11, 28) and farmers are fragmented in remote locations (P6, 9; P8, 18). Thus, high transportation costs occur (P6, 9) which entail high transaction cost, particularly for market-oriented farms, that are located far away from the villages (P5, 8). This situation is exacerbated by insecurity which makes physical access and business transactions even more difficult in some places (P2, 3). Additionally, due to the poor condition of infrastructure, for example in Benue a major yam producing state, produce mostly spoils during transport, where there may even be car accidents or damage (P7, 13). Generally, logistics are hindered by lack of literacy and digitalisation (P1, 1). While mobile phone coverage has

improved, access to electricity is still a challenge (P11, 28).

The lack of infrastructure (P3, 6) and inability to bring the produce to the market (P6, 11) lead to a dependency of farmers on middlemen (P3, 6; P6, 11) who determine the price (P6, 11) and buy off produce to sell it in urban markets (P3, 6). They capitalize on farmers (P6, 9) and make the major profit through buying off and transporting the produce (P5, 8). Farmers do not have enough market information (P6, 11) to know the prices (P5, 8), or the value of their produce (P6, 11), so they will sell at the suggested prices. This sometimes happens even before harvest, when the middlemen buy up per field or hectare (P6, 11). The limited market information hampers farmers (P11, 28; P6, 9), since they have to bear the transaction cost that stem from the search for information (P5, 8). Such information is essential for the commercialisation of the sector, as well as the improvement of opportunities for farmers through better prices for inputs etc. (P11, 31). Lastly the quality and quantity of the produce is decisive, since the quality determines if the product is accepted in the market and the quantity determines if off-takers are willing to come and buy the produce (P8, 18).

Since smallholders sell perishable goods on the open market they are at the mercy of processors, who can determine the price. They may be asked to transport the produce to the processing plant at their own cost. The agreed price may, however, then be renegotiated. Due to their position, the buyers can come later than agreed, so that the produce, such as cassava tubers, loses weight (P7, 13).

Generally, at the market, the smallholders are at the mercy of the buyers. If they do not want to take their goods home again, they have to sell at the demanded price (P8, 21). When farmers factor in all their costs, most of them will realise that they are producing at a loss (P6, 11). Furthermore, farmers lack cooperation, collaboration (P11, 28) and bargaining power due to the lack of organisation and pooling of resources (P6, 9). It happens that agricultural companies are not paying farmers according to the contract they agreed on, so that farmers lose trust in this business relationship (P8, 22)

The youth should be engaged in agriculture as an enterprise to enhance productivity and production (P11,31). Among farmers, there is a missing willingness to add value. Therefore, market access is constraint by the prevalence of subsistence production and orientation (P5, 8), with most farmer still being subsistence farmers and few of them monetising their produce or growing cash crops to sell (P12, 32). Since everybody in Nigeria is engaged in agriculture in some form, smallholder agriculture covers a wide spectrum of people (P12, 36) and their engagement also changes from year to year and from farmer to farmer (P12, 32).

The fertilizer disbursement process involves a lot of bureaucratic procedures. By the time this process is completed, various time slots for fertilizer application may have passed. The output

and quality of the produce and thereby the income of the farmer is drastically affected (P7, 14). The process of obtaining a license from the National Agency for Food and Drug Administration and Control (NAFDAC), Standards Organisation of Nigeria (SON), or an agreement sign from a court is very bureaucratic and therefore a crucial hindrance (P11, 29). Obtaining a Certificate of Occupancy (CofO) involves a costly and highly bureaucratic process, which can take years. Having a certificate for a piece of land is essential as a collateral for loans, but most farmers do not have land rights but rather operate on land by heritage (P11,30). Generally, various fees and licences act as strong disincentives for farmers to enter the formal economy, to grow cash crops or employ workers, etc. (P12, 34).

The government and the central bank offer farmers a variety of low-interest agricultural loans through the banking system. However, banks are usually not present in rural areas and therefore difficult to access. In addition, farmers may have to provide unrealistically high collaterals. Sometimes farmers are required to bring their traditional leader to guarantee for them. If this leader is not sufficient as a guarantor, the loans are usually given to businessmen, who in turn lend them to the farmers at a high interest rate. They are close to the farmers and do not ask for collateral, but secure repayment, for example, through a system of deity (P7, 15). Farmers may be required to form a cooperative and provide a bank statement as collateral for a loan. Usually only business farmers have a cooperative account, as other farmers cannot afford it, or prefer to keep the money at home because of the distance to any bank and the insecurity on the streets (P7, 17). The credit provision by the government did not work but after privatizing the system it was even worse because of the poor organisation (P10, 26). The context around government programmes makes farmers think that they are being rewarded for their loyalty during the elections. Thus, they see them as grant and not loan programmes. For that reason, the loans are not repaid, with small farmers often unable to repay anyway due to their situation (P12, 33).

There are legal fees that are required to sell at markets (P6, 12; P9, 24). These include fees for renting a stall, or a shade as well as fees paid to market associations (P9, 24), like market guard and commodity associations (P6, 12). Even though they are legal, in some cases they are not receipted (P6, 12). High taxes and fees discourage farmers from selling formally and even force entrepreneurs to stop doing business since they cannot afford these (P10, 27). Smallholders sometimes don't have access to certain benefits because of official fees. The highest bidder takes what is coming from the government (P6, 12).

Another problem is the inconsistency of policies, where with the change of government, policies are discontinued due to political reasons (P9, 25). Furthermore, social interventions by the government are not properly implemented (P1, 1) and initiatives to support market access of smallholders do not work, since there is little or no consultation of farmers in this process

(P8, 23). The introduced import bans have hardly any benefit due to smuggling and other means of circumvention (P12, 35). Furthermore, the timing of fertiliser distribution is often poor, due to the missing differentiation of policies between the climatic zones of Nigeria, which is why farmers receive fertiliser at a time when they do not need it. Farmers resell that fertilizer, since they may need the money and know they will receive fertilizer the year after (P7, 16). Another case is that figures are manipulated to give the impression of a successful intervention. P1 witnessed situations where numbers of participants and yields of interventions were reported to be higher than the actual number. P1 also witnessed farmers being linked to input suppliers for reasons other than qualification (P1, 2). In a recurring pattern, supposedly purchased tractors and fertilisers are presented by the government in ceremonies and photo shoots and then the materials disappear. Sometimes they are only borrowed and presented for the sake of pretence (P2, 5).

When there is a surplus of agricultural products and prices fall, the government does not support smallholders sufficiently (P6, 10). Without a price ceiling and floor, the prices collapse during this production glut caused by simultaneous harvesting. As a result, farmers will sell produce most times below production cost (P7, 13). These gluts occur in good years especially in the staple food crops of the respective regions. There is not a high crop variety and advice, coordination (P12, 32) as well as entrepreneurial skills, or knowledge is missing (P6, 9; P12, 32). Government programmes can increase domestic production, but they can also lead to such a glut and thus not benefit farmers (P12, 33).

Further challenges include limited finance, ignorance, multiple taxation, high interest rates, lack of credit schemes (P4, 7) and climate change challenges (P6, 9). The latter affects the occurrence of natural disasters, pests and the variance in soil productivity, which is also affected by overcultivation, desertification and erosion (P12, 32). Moreover, funds for extension services do not reach the farmers because those who manage the funds do not let the funds reach them (P8, 19).

The government is not playing a significant role in the market access of smallholders. A smallholder farmer cannot get much from a government agency (P8, 21).

6.3 Bribery - C.2

Bribery in the distribution of fertiliser and tractors is very common - on a scale, six out of 10. The number of tractors available in the local government area is usually insufficient, so farmers who pay bribes are favoured. Other farmers may receive the tractors months after the beginning of the harvest season. Fertiliser is available from the agricultural development programme units - again, bribes are paid for preferential treatment. By affecting the equitable distribution of these inputs through bribes, the size of the acreage cultivated, the yield and thereby the

competitiveness is affected (P5, 38).

Even though bribery is called consensual, it is indispensable or rather imperative for the farmers in order to get their way. The capacity to produce is affected by having to bribe the police, the credit officers and even the ministry officials, such as agricultural officers (P6, 41). Bribes hinder smallholder farmers in their daily lives. For instance, during the process of obtaining a license, in land use and landownership, during the transportation of goods and credit access. The latter may for example involve an official, who offers a loan to a farmer in exchange for 50% of the loan value. Bribery is the most universal and palpable form of corruption, which every smallholder will experience over his or her lifetime (P12, 44). Furthermore, it is increasingly legitimised by being seen as something that can oil the wheels of business (P8, 42).

Farmers would at most bribe security officials. Otherwise, there are no reasons for bribery (P9, 43).

6.4 Extortion C.3

Extortion is summarized under the sub-categories C.3.1, C.3.2 and C.3.3. Possible outliers which could not be assigned to these subcategories would have been assigned to category C.3. This was not the case, which is why all observations concerning extortion are described under the sub-categories.

6.4.1 Extortion transport - C.3.1

The most common case of extortion is perpetrated on the road by the police and other law enforcement agencies (P6, 60), or security agencies at checkpoints as well as by revenue agencies at produce control checkpoints (P8, 64). This extortion happens during transportation (P3, 52; P3,50) on the way to the market (P6, 61; P1, 45; P7, 62; P3, 50) and when they try to access rural centres (P2, 48). The perpetrators may be the police (P4, 54; P3, 50; P1, 45; P2, 49; P11, 68; P6, 60; P9, 65; P7, 63; P10, 67), road safety officials (P2, 49, P11, 68; P3, 53; P4, 57) the army (P4, 54; P2, 49), the security and civil defence corps, highway patrol divisions, (P2, 49), vehicle inspection officers (P2, 49; P11, 68) people collecting produce tax, thugs (P9, 65), or customs (P11, 68; P12, 69). In addition, because of the insecurity there are local vigilantes, who finance themselves through extortion at checkpoints (P2, 49). When attempts are made to inquire why the extortion is taking place, the extortionists give various reasons, e.g. that they do not receive enough money for bullets, fuel or repair of uniforms, etc. (P4, 56).

The police or the army mount illegal road checkpoints where they collect bribes for no particular service (P4, 54). The intention to stop someone under a pretext (e.g. to check something) is the extortion itself. Thereby they already have a certain amount in mind (P1, 45). In the event of a traffic rule violation, it is possible that the case will be decided in a road safety corps mobile court, while the vehicle is confiscated. It may occur that the case is not adjudicated. The farmer

is still expected to pay a certain amount to get his vehicle, goods or both back (P3, 53). Farmers may have goods stored on the roof so that the police fine the farmer. However, firstly the road safety corps is responsible for such offenses and secondly the amount of the fine is random and no receipt is issued. Particularly the latter convinced P3, that this money ends up in private pockets (P3, 52).

Since the produce is raw and perishable (E.g. cassava has to be peeled within a given time for certain purposes) the farmer is in a hurry to sell (P1, 45). If farmers do not pay at checkpoints, they will be delayed (P7, 63; P6, 61; P7, 62; P8, 64) up to a few days (P7, 62). The delays are problematic since produce (e.g. orange) is highly perishable (P7, 63; P6, 61; P8, 64) and thus the farmers may incur losses (P6, 61), so they are forced to pay (P7, 62; P9, 65). To delay, the police will look for a mistake or even set it themselves (P7, 63). If the police are not paid, the farmer may even be detained (P1, 45) or arrested (P4, 54) and the produce spoils (P1, 45). In fact, people may even be shot if they do not pay (P2, 49) and in case farmers are taken to the police station, they do not face fair treatment because the police protect their colleagues (P7, 63). Furthermore, if people refuse to cooperate with the officers, these checkpoints can impede traffic and cause ghost roads or long traffic jams, since the personnel will search for reasons to make the drivers pay (P2, 49). Through produce loss and extortion, the cost will accumulate (P6, 61) and rise considerably. The farmers usually do not have the opportunity to add value to the produce to compensate these losses (P7, 63) and will pass on the losses to consumers (P6, 61).

Extortion also affects the middlemen (P5, 58; P11, 68) who usually handle the transport of goods, buying in large quantities from farmers to transport the produce to market and sell it (P5, 58). Apart from this, they may also sell inputs or provide information to farmers. During extortion, they are asked for certain documents or simply money. The costs are passed on to the smallholders through the middlemen's pricing (P11, 68). Such extortion is very common, to the extent that it is considered normal. Therefore, when buying the goods, the middleman will already factor in the cost of the extortion. This way, the farmer receives less money from the middlemen, who also make by far the most profit from the transaction (P5, 58).

Extortion at road checkpoints are considered as common (P6, 61), very common (P10, 67; P5, 58) or very frequent (P4, 55) and has become institutionalised in Nigeria (P4, 56). It is like a norm (P1, 45), "a way of life" (P4, 54) and thus considered as normal (P5, 58) to such an extent that it happens openly (P4, 54, P1, 45) and you may even get change (P1, 45; P4, 55). The phenomenon is considered as very common in the western states of Nigeria – not so much in the north. P8 experienced this himself (P8, 64).

These costs depend on the type and quantity of goods transported (P10, 67). As a motorist you pay 100 to 500 Naira at each checkpoint (P4, 55). Farmers as well have to pay on each

checkpoint, but the minimum amount extorted for a trailer load is 500 Naira (P7, 63), usually ranging from five to USD 10²⁶ (P4, 54). It affects both private and business vehicles. Regardless of previous transactions, payment (P8, 64), at least a small bribe (P12, 69) must be made at each checkpoint (P12, 69; P8, 64). However, P4 reports that If for instance, 2000 Naira is paid to the police or road safety officers at one checkpoint, an attempt can be made to bargain at the next two or three checkpoints to reduce the amount there (P4, 57). Generally, the agencies set the price themselves. The smallholders often pay 15% or more of the value of the goods they want to sell that day (P8, 64). Companies, on the other hand, usually pay the police in advance from the headquarters to be issued a clearance. If you do not have such a clearance you are extorted at every checkpoint (P2, 49).

Because of insecurity there are numerous checkpoints on the road set up by various agencies. There can be one checkpoint every three kilometres (P2, 49), up to 20 on a distance of 30 km (P11, 68) 12 on a distance of 30 miles²⁷ (P12, 69), or up to five checkpoints on a distance of 50km from the farm to the market where farmers are extorted (P6, 60). Furthermore, when they move produce from Benue state to Lagos²⁸, they may be confronted with more than 100 police checkpoints (P7, 63). Another example is, on the roads from Lagos to Asaba there are more than 115 police and 36 army checkpoints on a distance of about 300 km²⁹ (P4, 55). On market days there can be checkpoints at an interval of less than a kilometre. P2 witnessed situations with checkpoints every 500 to 800 metres, like at the beginning and at the end of a bridge (P2, 49). The End SARS protests have reduced the occurrence of such extortion, but it is not clear how sustainable this development is (P6, 60).

Extortion increases the cost of transporting the produce to markets and therefore the final product price (P10, 67). The smallholders lose 20 to 30% of their final profit. Because of this extortion combined with poor infrastructure they tend to sell to their local communities irrespective of the price (P8, 64) Due to the frequency of payments even small trips to certain markets can be economically unviable for smallholders (P12, 69), since they will often spend more money for the process than they gain (P3, 50) and may not even make a profit (P7, 62). The accumulated costs will be passed on to the consumers (P6, 61), to whom the price will be very high (P7, 62). The free movement of goods at the borders is impaired, where extortion tactics by customs and security officials constrain the trade of farmers across borders (P12, 69).

6.4.2 Extortion market - C.3.2

There are many people in the market who extort sellers like shop owners as well as farmers

²⁶ 3,800.43 Naira (16.05.2021, 20:15) (XE.com Inc., 2021a).

²⁷ 48.28 km.

²⁸ Lagos – Benue (to the geographical centre of the state): 780km (OpenStreetMap, 2021a).

²⁹ Lagos – Asaba: 452km (OpenStreetMap, 2021b).

selling on the ground (P10, 75). Seemingly legal taxes are collected on behalf of the local government. However, these taxes do not seem to be invested, as there are few, or not properly maintained shades stalls and a lack of sanitation facilities. The lack of investment and the intimidation methods in tax collection makes P3 unsure whether taxes are legal and/or paid to the government. Furthermore, sometimes collectors charge a little extra for themselves, for example when seizing property (P3, 74).

Inspectors, especially livestock inspectors, may extort money from farmers selling at the market. This is a daily phenomenon for the farmers and even a norm. Either the inspectors collect questionable livestock taxes or they extort money from the farmer during livestock inspection. If the farmers do not pay the latter, the livestock is declared unfit to be sold, which means it cannot be sold or it is confiscated (P1, 70).

The accumulated cost of multiple taxation discourages farmers from selling on the market. Taxation occurs by federal, state or local tax collectors, but also informally by traditional institutions or authorities that are still in existence. The traditional institutions remit taxes to “their own line of governance”. Constitutionally they are only given honourable roles, but everybody knows that they have to pay this “haraji”³⁰ and it is commonly accepted and used to preserve these traditional institutions. However, for instance, in the north east some of the traditional institutions are “sympathetic”, where taxes are collected infrequently and some are “stringent”, where taxes are collected frequently. It also depends on the size of the communities, where small communities without market days are usually not taxed since they usually lack the resources to collect tax from them. On the other hand, on market days of larger communities all sorts of officials emerge to collect taxes (P2, 73).

6.4.3 Extortion service provision - C.3.3

If a person does not have connections with an influential official, he or she has to give him something to receive fertilizer allocation (P2, 76). Such extortion is not even hidden. Extortion by officials happens in every office (P4, 87) and the provision of bureaucratic services has been taken over by corrupt practices (P4, 82) and depends on how much a person is able to pay (P4, 80). For instance, a person is told to pay USD 100 for a service (like a driver license, or tuition fees), but only 20 is receipted. When the person inquires, the officer will ask if the person does not want to have the service done. When a motorbike driver seeks something from a chairman he or she has to pay something, otherwise his or her matter is delayed or postponed. Most of the money a civil servant has available comes from such income, not from official salary (P4, 87). However, due to the Single Treasury Account various opportunities for private enrichment are blocked. Hence the officials now use other methods for such

³⁰ Hausa for “Tax” (kasahorow Foundation, 2021)

enrichment. They say, for example, that there is no A4 paper to print and thus signal that they expect something in return. They can also ask directly what their share is. In case of an objection, they say "come and sign the documents by yourself" (P7, 91). For a potential opportunity, a particular service, smallholders may even borrow to settle extortion payments. It is still possible that they do not receive the respective service (P4, 81).

Even though the services of agricultural officials such as extension officers are usually free of charge (P6, 90), they sometimes expect a favour in return for their services. This may be fuel money, transportation cost or other forms of payments to "make it comfortable for them to come". It also depends on the location. P3 gives the example of Umukadia, a hilly area that is difficult to reach. Due to lack of cost coverage and salary, the extension officers pass on the costs to the farmers, who have to pay to make sure that the officers actually come (P3, 77) and prevent them to go to other people, who might be willing to pay. For that purpose, money is usually collected in the locality. This is a common and even standard procedure (P6, 90).

Smallholders are confronted with multiple taxation by the federal government, state government, local government and indigenous governance structures (P4, 83). Local or state officials may come to levy ad-hoc taxes. They claim that farmers do not have the right to farm a certain piece of land and demand money to look the other way (P12, 96).

Farmers resort to informal sources of credit, because accessing microfinance involves high formalisation cost and high fees charged by officials (P4, 78). Furthermore, farmers are extorted in the process (P6, 88). As a condition for credit access, bureaucrats demand secrecy of the (extortion) transaction. The latter happens in direct exchange in the offices rather than online. In fact, the registration itself seems to be fraud, since P4 suggests that nobody actually receives these government supported credits (P4, 78). For credit access, farmers usually need to provide a collateral. If farmers do not have a collateral or a relative, who may function as guarantor, they may turn to their local chiefs. If they do not have a good relationship with this chief, he may refuse to function as a guarantor, or demand something for this service (e.g. a share of the credit) (P7, 91).

When officials have distributed available credits to their favourites, they continue to advertise that the funds are still available. Unsuspecting smallholders are asked to pay a "fee" (a bribe) when applying for the non-existent loans. Sometimes the bureaucrats use intermediaries to approach the smallholders to prevent the law enforcement agencies from tracing the crime back to them. They are usually family or friends who have no connection with the institution responsible for disbursing the credits. The fees might be legal, for example if there are credits available. However, usually the amount paid is considerably higher than the receipted legal fee. P4 gives the example of USD 100 for registration, whereby USD 97 is extortion and only three dollars official fee (P4, 79).

In the process of obtaining a license from the NAFDAC, SON, or an agreement sign or a Discreet Log Contract from a court, the farmers might have to pay money to the officials involved to get approval. This hinders the formalisation process. The court case is less common, but particularly delicate since the court is seen as “temple of justice” (P11, 93). Generally, extortion hinders access to justice. By the time the demanded bribes are paid to the police and relevant officials in the court system, the process may have already failed and the victim in debt or forgotten (P4, 82).

With the change of land distribution, the allocation of land by local and state officials to their political allies often forces smallholder to pay bribes and kickbacks to avoid having their land taken from them. This is a very common occurrence and the reason why many farmers use derelict, unused land for farming even in larger cities (P12, 97). Obtaining a CofO involves a costly and highly bureaucratic process, which can take years. Having a certificate for a piece of land is essential as a collateral for loans. There is an “official amount” you pay and you have to “pay the people working in those ministries” (P11, 95). P4 experienced land registration cost from 500 to USD 700. The actual fee was 200 to USD 300. The difference goes into private pockets of town planning officers. Notwithstanding this, the practice is not questioned (P4, 86). During house construction fees are charged by the Environmental Management Authority. For example, the cost of digging the ground is USD 250. The fee is questionable as no receipt is issued (P4, 85).

In the farmer-herder conflict, local traditional chiefs, supported by local militias or armed thugs, extort herders in exchange for permission to engage in their grazing activities in their territory unmolested. This is particularly significant in contested areas. Communal conflicts over farmland, often involving sustained cycles of violence, usually stem from issues of land ownership, land use, clan identities, villagers’ identities, ethnicity and even sub-ethnic divisions. Beside extortion through unofficial armed militias this practice mainly evolves around security officials like police and military, who exploit such divisions to extort money based on the threat that they will take sides if payment is not made. It often represents an alternative livelihood to compensate for the loss of embezzled funds meant to pay officials (P12, 98).

6.5 Auto-corruption - C.4

The impact of auto-corruption on market access is the reduction of monetary resources that could potentially go to smallholder farmers. This is a common occurrence (P1, 99).

As funds for infrastructure are misappropriated, farmers cannot access markets by choice. Especially in rural areas, they are at the mercy of the buyers that come. These middlemen buy the produce at knock-down prices and sell inputs at high prices. Moreover, farmers cannot sell at the best time, but only when the quantity is agreeable to the transporter (P2, 101).

Taxes collected for the provision of basic amenities in market places seem to be embezzled and not used for their intended purpose. It is not clear if this money reaches the local government or if it ends up in private pockets. This scheme is recurring even with changing governments (P3, 103).

Ghost workers are paid salaries but their functions and thus desired outcomes are only performed on paper. Embezzlement is common, and one reason when funds for rural development are not made available. Property misappropriation occurs, for instance, when allocations for farmers are given to politicians and influential people (P6, 104).

Security sector corruption is an endemic phenomenon. Embezzlement at the strategic level increases the incentives for it at the operational level. The latter is also incentivised to generate threats that require new resources that create new opportunities for embezzlement, again producing avenues for extortion at the tactical level (P12, 105).

6.6 Contract fraud - C.5

Contract fraud may not be directly linked to smallholders (P3, 111). However, it usually happens in every sector including agriculture and adversely affects the outcomes of contracts (P5, 113).

The allocation of contracts can be seen as a "lottery ticket" that comes without responsibility and contract fraud as an accepted norm. If all the "concerned" people got their share, "nobody cares". P2 was involved in a training where a seed and input distribution contract included people who were not even farmers. Beneficiaries were selected regardless of the training. Responsible officials may even distribute substandard quality fertiliser, all that matters is that they have done something (P2, 109). Therefore, a common occurrence is that substandard, non-durable farm equipment and tools are purchased from suppliers which the farmers sometimes do not even use or need. Substandard equipment is bought at a lower price than higher quality equipment, so that the difference can be diverted (P1, 107). A common form is the purchase and supply of fake or substandard seed through government agencies. Farmers still receive the inputs at a cheap rate, but its benefits are questionable due to its poor quality (P8, 118). In July or August 2020, the National Agricultural Seed Council sealed a warehouse in the Federal Capital Territory, because it contained substandard seeds. These seeds were deliberately purchased and distributed by a governmental agency (P8, 117).

Finding that market-level subsidies were not reaching farmers, the previous government introduced the e-voucher system under the GESS. The system was not biometric, discriminated against illiterate farmers and allowed distributors to capitalise on regions with marginal network connectivity. However, it was comparatively more efficient, since contracts were awarded to private companies, the process was less bureaucratic and targeted farmers and certain

commodities directly. The current government has abolished this system, probably because it excluded state and local governments. Now, inflated fertiliser contracts can be issued and no one can verify whether the fertiliser reaches the farmers or not (P2, 110). For instance, contracts for the supply of fertilizer are assigned as a means to secure political patronage. In the north east, this strategy is the most effective way to secure political patronage (P2, 108).

The officials involved in support programmes for smallholders tend to purchase equipment, not based on the needs of farmers, but based on the possibilities for private enrichment (P8, 119). For example, in the Anchor Borrowers Programme in 2018, officials tried to supply farmers with unnecessary amounts of hand ploughs. The farmers would have had to bear the costs of the inflated contract, which is why they resisted (P8, 116). Officials tend to benefit from the procurement of expensive, higher priced, materials which offer more room for inflation than small equipment (P8, 120). Such price inflation was witnessed by a veterinarian, who was supposed to assess the livestock to be distributed and prepare a cost plan for vaccination. The veterinarian used market prices for the latter, but refused to agree when the supervisor wanted to increase the figures by 300 per cent. As a result, the veterinarian was fired (P2, 109).

After receiving a contract, contractors have to settle different actors. In the bidding process, the officials involved demand a share of the funds to be awarded. It is not the qualified person that wins, but the one paying the most to the responsible officials. Additionally, when the contractors want to start the project, they will first have to pay a share to the local villagers. The fluctuation of prices for building materials further increases costs. The amount left does not suffice to complete the project and it will be abandoned. Examples are market stores, boreholes, and infrastructural projects like bridges or roads. In the last case, the condition of that road is worse than before the project started. Where there was solid compressed earth before, there is only mud after the start of construction (P7, 115). The same applies when contracts for infrastructure projects such as roads to connect farms with markets, are inflated, or completed with substandard quality, so that the infrastructure is already dilapidated before project finalisation (P1, 107).

If a contract is abandoned because the contractor and the contract giver share the money instead of investing it, this affects, for instance, the construction and completion of projects such as infrastructure, markets, or training for farmers (P10, 122). In the case of contracts by the Niger Delta Development Commission, it was also observed that contracting companies were owned by politicians. Such political elites are using contractors as figure heads to protect themselves and gain a contract to divert the money involved (P7, 115).

Contract fraud affects the building of facilities like abattoirs, markets, roads and the reparation of stalls (P9, 121) infrastructure contracts (P9, 121; P12, 123), ecological contracts, anti-erosion and desertification as well as irrigation measures, agricultural industries, electrification

contracts and flood diversion. Such contracts are either not implemented or more often completed to a substandard degree and can be found everywhere in Nigeria. The aforementioned contracts are essential to enable smallholders to access markets (P12, 123). For the latter roads are particularly important to provide access to cities. If such a contract is not executed because it was fraudulently awarded or allocated, it becomes a major impediment (P4, 112).

6.7 Subsidy abuse - C.6

Fertiliser is usually imported in Nigeria and is therefore expensive, which is why the government subsidises it (P7, 141). The GESS provided farmers with 50 to 75% subsidised fertiliser and seeds. However, the rurality hindered farmers' access. The responsible officials capitalised on this shortfall and sold the commodities to middlemen, possibly to secure political patronage. Since the inputs did not reach them, the farmers could not increase their yields (P2, 126). Due to the widespread corruption, the previous government made efforts to transfer the distribution of fertiliser into private hands (P6, 135) through the e-voucher system, where farmers received vouchers and redemption locations on their phone – effectively exempting officials from the direct disbursement (P5, 133). Here companies faked figures to receive subsidies by the state. Most of the subsidies went to so called “briefcase farmers”, who were not actually farmers (P9, 144). Regardless of these shortcomings, the programme was able to curtail reselling of fertilizer (P11, 149; P5, 133) by bureaucrats, cronies and other persons, not engaged in farming (P5, 133) to “farmers in suit”, who are no real farmers but for example in government (P11, 149). Recently (P5, 133), since the new administration (P6, 135), this approach has been abolished and there is a return to the previous system (P6, 135; P5, 133). Since 2016, with the new government the situation worsened, as subsidized inputs are now only accessible via the ADP (P2, 127). Registered farmers are entitled to subsidized fertiliser (P5, 133) usually 50kg NPK but due to red tape and rationing some farmers even buy from the market for 8500 instead of 5000 Naira (with allocation) (P2, 127). Furthermore, fertilizer is usually not sufficient for all registered farmers, so that persons in charge of the allocation process favour their cronies. Thus, few people receive almost all fertilizer. Some of them are not even engaged in farming and therefore resell the fertilizer at a higher rate to the farmers who did not receive fertilizer in the first place. Generally, bureaucrats (P6, 135; P5, 133) and their cronies [still/ again] engage in this reselling at market prices (P5, 133) to Nigeria or other countries (P6, 135), which increases the production costs for farmers (P5, 133). This reselling is a widespread phenomenon (P10, 147).

The distribution of farm inputs like fertilisers, tractors, cottages, milling machines, etc. is marked by corrupt practices, where, those inputs go to for example middle men instead of farmers (P12, 150). Furthermore, P2 witnessed a case where farm inputs were distributed to beneficiaries, some of whom were not even farmers, regardless of prior training (P2, 129).

There are training centres where government officials are prepared for their time after politics. P2 witnessed a truckload with 500 or 1000 bags of NPK fertiliser being handed over to the officials to distribute irrespective of the person, but these persons had political interests and so the fertiliser was diverted. In one year, even half of the allocation from one state was diverted to another state (P2, 128). Comparing to the Covid-19 palliatives, P7 assumed the possibility that fertilizer is stored in warehouses until the time is convenient to use it for instance in political campaigns (P7, 139). Fertilizer that is distributed to the local government is diverted. The chairman will share this fertilizer among his family members, or sell it to agro-dealers (P7, 140). There are situations in which officials connive with farmers they know to divert and sell subsidised inputs like fertilizer and seeds. The process is not transparent (P1, 124).

The price of subsidized fertilizer is often inflated. P7 witnessed bags for 5000 Naira (50% subsidized) being sold for 6000 to 8000 Naira by the officials in charge of disbursement. There are telephone numbers for such cases. However, P7 experienced that either the number did not work or he or she ended up with endless machine voice forwarding. Additionally, passing on such information can be potentially fatal for the person disclosing it (P7, 141). The due process of selling fertiliser is not beneficial to the officials, so they make the process particularly cumbersome to keep farmers from coming. They can then sell the fertiliser to market traders for 5000 Naira plus 1000 or 2000 Naira and remit 5000 Naira to the government (P2, 127).

Subsidised fertiliser is still supplied by the government. The fertiliser does not benefit the smallholders because, the funds meant for the smallholders are shared among the responsible actors before they can reach the farmers (P10, 147). Funds are also lost as government programmes are abused by artificially inflating the number of beneficiaries and diverting funds (P1, 125).

The government fails to support smallholder farmers since low- or interest free loans (P10, 148), credits (P10, 148; P4, 130; P6, 136; P7, 139) or grants (P6, 136) are diverted by officials either in other sectors, non-farm activities or to private farms of responsible officers (P6, 136). They are also given to family, friends, members of the elite (P4, 130) and businessmen (P7, 139). Particularly vulnerable groups and women do not receive loans because the funds for this purpose are embezzled, or diverted (P10, 148).

Consumption subsidies do not support the people, but rather enrich the elites who engage in trade with neighbouring countries with fuel, amongst other things. Moreover, the subsidy system is not transparent. Protests in 2012 led to a change to production subsidies, which, however, never reached the farmers, but at least partially benefited politicians (P4, 132). Subsidy programmes are usually designed to benefit a certain favoured group, such as friends or party loyalist of the respective decision makers. For instance, in the 2018 wheat planting season the Maize, Millet and Sorghum Farmers Association created a list of beneficiaries for a subsidy

programme. The list was submitted to the government. When the list returned various names were replaced by the responsible officials. The association contested this and since they could not reach an agreement, farmers did not benefit (P8, 142).

6.8 Favouritism - C.7

Favouritism is very widespread and common (P11, 176). Nepotism is widespread (P10, 175) everywhere in Nigeria. It is so prevalent that almost nothing is unaffected by it (P2, 156).

Favouritism also comes in the form of gerontocratic affinities and male chauvinism. Thus, older persons from the age of 60, who are in power positions in politics and bureaucracy favour their own age bracket. The issue of youth empowerment is usually used for election campaigns and dropped thereafter to continue the "old" practices of corruption, favouritism, regionalism, religion and nepotism. The young are disadvantaged by this system, which does not recognise the need for, for example, financial assistance nowadays. The bureaucracy is male dominated and sometimes men are favoured over women. Additionally, women are increasingly excluded from positions in the bureaucracy, since they are seen as inferior and incapable (P4, 161).

Favouritism can even be based on how a person looks and behaves. If a person comes to a local government headquarter looking poor he has to wait, is send away, or has to pay a bribe to see the chairman. If a person arrives with a police escort etc., he or she is directly invited to come in, no matter if the chairman knows this person or not (P4, 162).

Nepotism or favouritism is relevant in access to government programmes (P12, 177), for instance subsidy programmes, which are usually designed to benefit a certain favoured group of the respective decision makers (P8, 173). If you do not bribe officials, you have to know somebody who is influential to receive fertilizer allocation (P2, 155). If someone needs something from an official and they share certain characteristics such as ethnicity etc., it is most likely that the person will get what they want or need from the official, be it fertiliser, a voucher or something else (P2, 156). Thus, positions of power are used (P6, 168) to favour people based on ethnicity, religion (P1, 152; P6, 168) or region (P6, 168) in the beneficiary's selection (P1, 152) and distribution to smallholders to the disadvantage of the public. These cases are very common (P6, 168) as in 2018 where lists on a beneficiaries list were replaced by the responsible authorities (P8, 173). In most cases such connections determine the allocation to smallholders, merit or due process does not usually come into play (P6, 168). As a result, person in charge of the fertilizer allocation process within the agricultural development programme favour their cronies (P5, 165) and nepotism may be used to be favoured for support services like tractors in a particular local government area, where the number of tractors is insufficient to supply everybody (P5, 164). Many times, equipment is even allocated regardless of the needs of smallholders. There were situations where small equipment for primary

processing was given to smallholder just because they were from specific regions. The equipment was not utilized and so others were deprived of this opportunity (P1, 151).

Favouritism based on ethnicity, religion (P1, 153; P4, 160), region and nepotism (P4, 160) is common and very visible in government appointments, the appointment of technical consultants as well as in the daily routine of administrative offices (P1, 153). It negates an effective selection by qualification (P4, 160) and reduces the quality of the service provision to farmers, since the officials are not selected on the basis of their capacity (P1, 153). As a result, unqualified officials are employed because of nepotism, whereas qualified staff is left unappointed (P6, 166). The majority of security chiefs is from the north and 50% of the conditional cash transfer goes to one region. The ministries are not staffed based on merit (P4, 163).

Assigning contracts for the supply of fertilizer is the most effective way to secure political patronage in the north east (P2, 154). Fertiliser was repeatedly diverted by officials due to political interests (P2, 156). It serves to settle party members of those responsible for distribution and diverts benefits for smallholders to the non-agricultural sector (P6, 167). Farm inputs, like fertilizer, are often distributed to local government chairmen to provide it to farmers. The farmers are at the mercy of the chairman who favours family or persons from his party or with good relations to him or her. Some states thus changed to a distribution through the state ADP. This is supposed to be a reliable way for distribution, but is also affected by corruption. In Nigeria, you need to support the ruling party to get anything (P7, 170), since for instance, subsidy programmes are usually designed to benefit for example friends or party loyalist of the respective decision makers (P8, 173), as in the case of the current government which favours supporters and farmers from the region of the responsible decision makers (P10, 175).

P11 reports the case of a Fulani herdsman who was not brought to court even though he had attacked farmers. Responsible officials were from the same ethnic group which is why he escaped prosecution. Moreover, certain groups are favoured by persons in authority and information is only disseminated to certain groups (P11, 176).

Credit facilities might be in existence in Nigeria (P4, 158), but ethnic, religious and regional favouritism as well as nepotism affect the distribution (P4, 160) so that the bureaucrats would give it to friends, family, or members of the elite (P4, 158) and thus negating an effective selection by qualification (P4, 160). Usually there are not enough credits for everyone who needs such a credit, which is why 400 to 500 people would line up in front of these offices for credits that are meant for maybe five people. Officials will select according to religion, ethnic group, patrimonial relations, region or language. Even within religions, there is a distinction by orientation. Officials will prefer the people with whom they have the most in common. This system is so widespread that people see it as normal and do not even reprove it (P4, 159).

In terms of service provision by the government, the northern Muslim areas receive more attention. The farmers there seem to be better off than farmers in the south (P3, 157). Nowadays, only the north of Nigeria has irrigation systems. Northern leaders, who have led the country for most of its rule since independence have favoured the north in terms of agricultural development (P7, 171). The north is favoured in terms of the required average marks for the admission into universities and secondary schools. This leads to educationally disadvantaged officials (P4, 163). Officials from a certain religion tend to favour their religious counterparts. Since Buhari, a northerner and Muslim, is president, the farmer-herder conflict began. The Fulani herdsmen do not fear prosecution because they are from the same ethnic and religious group as most service chiefs. Additionally, in terms of education and job opportunities, the ethnicity of the incumbent president is favoured. Credits are given out without interest in the north due to the Islamic prohibition of interest. The key positions in the ministries and offices are occupied by northerners. Agricultural policies are tailored for the north, where farming is less fragmented and more mechanized, and applied for the whole country (P7, 172).

Neptotism is a problem for everyone, but only to a lesser extent for smallholders, because if a farmer offers a good product, people will buy it (P9, 174). So, favouritism does not play a role during the selling and buying, or business process itself (P12, 178). Notwithstanding this, political elites are exploiting in-group out-group divisions of the informal workforce for election purposes. Such divisions play a role for instance when indigenous groups hinder persons from other places, or other ethnicities or religions to participate in economic activities. Such divisions even result in xenophobic killings (P4, 163).

6.9 Deliberate waste - C.8

When funds for projects are allocated, but not used for the intended purpose (P6, 187) and embezzled, they are not executed (P4, 182) and abandoned. Projects that should take only months take years. This happens for various reasons, often because of the change of government (P6, 187). Such cases hinder economic growth and access to markets since the invested funds are lost and projects are not completed. Such cases affect for instance rural infrastructure (P10, 191) and are a major obstacle to road infrastructure (P4, 183), where projects are abandoned and the remaining sum is shared among the responsible officials (P10, 190). Thus, much of the deficit in road infrastructure can be explained by corruption (P4, 183), which is a major impediment for smallholders, since roads should provide them access to cities etc. (P4, 182). It also happens that roads are built that are inaccessible, have no benefit to farmers (witnessed by P1) and therefore deteriorate unused or are abandoned rather than completed. This happens because perhaps costs are lower in that location or costs can be inflated to achieve certain benefits. This situation increases post-harvest losses as farmers cannot effectively transport their produce to markets (P1, 179).

Concerning other infrastructure, P3 witnessed the case of an industrial borehole for water supply which was supposed to be situated in a market area of a local government. The money was provided, but the project not completed (P3, 181). Such occurrences can also have a direct impact on people's health care, such as in the case of abandoned hospitals (P4, 183).

Wastages also occur in the distribution process, when farm implements are bought but not allocated or deployed and are left unused in warehouses or courtyards of the ministry of agriculture (P6, 187). Another example is the case of the head of service buying a house above the market price which moreover was not needed. The same thing happens with capacity building trainings etc. (P8, 188).

Especially since crude oil prices fell, the government is resource constrained. The expenses for seemingly irrelevant, bulges and expensive or white elephant projects, like flyovers for billions of Naira are in competition with other infrastructure projects or the provision of farm inputs which may improve market access of farmers (P2, 180).

Various projects are abandoned to keep budgeting and allocating money for it every year in order to create a "lifeline" for politicians. Such occurrences range from small water pipes to airports. Examples are markets, electricity projects or abattoirs (P9, 189). Costs for projects are inflated every year in every review process. People in office usually make long-term plans in order to increase funding, e.g. from the World Bank. In such abandoned projects, the main executor of the project usually pockets the funds budgeted for the project. When auditors come, for example from the road maintenance department, they are settled (P4, 183). Projects, such as those for roads are awarded every year because they are not completed. This affects the farmer's ability to receive information and inputs as well as to transport outputs (P11, 192).

Different research institutes provide support services to farmers in Nigeria. These include trainings before the beginning of the harvest season for example on new technologies and the provision of inputs at subsidized rates. The research institutes receive funding from the government. However, every year this funding arrives too late to train farmers. For instance, if 60 activities are planned for a year but the funds do not arrive until the middle of the year, 30 projects may already have been skipped. The funds are now partially invested in ineffective projects so that the institute does not have to return the funds to the government and still receive funding next year. This opens up opportunities for embezzlement and theft of funds. P5 opines that the allocation of funds is deliberately delayed until the farmers no longer require assistance, so that the funds can be diverted (P5, 184).

6.10 Legalized corruption - C.9

The funds that should be going into interventions for smallholder farmers is instead going into inflated costs for technical assistance. This denies smallholders access to high-quality inputs

that would increase their productivity and improve smallholder incomes (P1, 193). Furthermore, salaries for senators or governors are too high and continue to be paid long after resignation (P7, 197).

Legalized corruption is not an issue for smallholder since there is no transmission mechanism. Rather, it is an issue within the government (P9, 198).

Loan programs have extremely high costs and there is often no clarity about the allocation of these funds. Corruption is built into these programmes. If legal, such measures might be unethical or not constructive (P12, 199).

Since 1978, the land allocation process is in the hands of the government. It can, among other things, acquire land for the purpose of development. This applies for example for the restructuring and upgrading of infrastructural facilities and roads of former farm settlements. This right is sometimes abused, so that persons in power use their position to acquire land for themselves, instead for the public (P6, 196). Land in Nigeria is vested in the state. As land distribution is changing with the growth of cities etc. areas are often given to cronies, or political allies of local and state officials (P12, 200). The land use decree of 1978 stipulates that all land belongs to the government. Farmers only receive land when meeting certain requirements of people in office. Government officials across Nigeria own the vast majority of farm areas acquired with their social capital. Particularly in urban and peri-urban areas, farm land remains unused because the officials that received the land by questionable means or for instance personal connections do not release it for cultivation (P2, 194).

The land tenure system in Nigeria is more a system of heritage, which is why land grants are not really concerning smallholders (P3, 195).

Public office holders are not allowed to be in any business position except farming. Many politicians were granted land during their lifetime and the large farms were built and equipped by unexplained wealth. Thus, there are many famous politicians like Atiku Abubakar, Abdulsalami Abubakar and Olusegun Obasanjo who own large scale farms. There are many genuine farms as well as many that are used for money laundering. Everybody has a farm and scrutiny does not really exist. The large-scale farms, which work and are financed by unexplained wealth have a high cost advantage over their fellow farmers. The products from these professional farms, as well as imported products, are not only cheaper, but also of higher quality than the products of small farmers. Both large and small farms compete in local markets and the average Nigerian consumer is only interested in the product, not the origin, etc. (P12, 201).

6.11 Corruption private - C.11

Agents of large companies usually patronize markets at certain intervals. These days are usually not publicly known. After their arrival during the day, the prices become exorbitant, since

they buy large amounts of commodities. The cost might be expected to increase by 20% over five hours, so that people obtain information about the arrival times through bribery (P2, 222).

Rural non-organised smallholders are not likely to know what a subsidy is, or how to access such opportunities (P3, 223). However, smallholders are usually organised to represent their interests and to strengthen their negotiation position (P4, 224). Subsidies usually concern these organised small-scale, or mid-sized farmers. Subsidy abuse in this case refers to funds received in the name of the cooperative, where only a few influential farmers within the cooperative benefit by diverting these funds for private purposes (P3, 223). Furthermore, such organisations have selected representatives or leaders, who may abuse their position to exploit the farmers by corrupt practices in the form of fines, registrations and levies. The government may even intervene to support the election of leaders or they may even impose such leaders on the smallholders (P4, 224).

When waste management is outsourced to private companies, the environmental management agency cannot interfere if the companies exploit or overcharge the people. The companies pay the agency upfront and can then exploit the people to recover the cost (P4, 226).

In the process of building a house in metropolitan areas, organised youth will come to extort money. If the money is not paid they may use threats, harassment, stealing or even kidnapping to enforce payment (P4, 227).

Adulterated chemicals and farm inputs are sold to farmers by the private sector. This also involves the government, as it is now again involved in the distribution of fertiliser (P6, 228).

Farmers are also involved in corrupt practices (P6, 229). When they receive loans for a certain activity they often use them for another purpose and do not want to or cannot pay them back. This is possible, among other reasons, because monitoring does not work properly (P10, 234). They can also obtain loans from agro-dealers in the form of inputs, which they pay back with produce after harvest season. Sometimes farmers cheat the agro-dealers, for example, with bags that are only partially filled with real produce. When this happens, the trader will naturally stop giving loans to such farmers (P7, 230). Private to private corruption may happen between farmers and the middlemen. However, it is likely that this is on a very low level (P8, 231).

Favouritism is not a big issue for farmers, apart from instances where certain persons create markets (e.g. for certain crops) only for their respective groups or for instance ethnicity. There is a coded way to exclude other people from these markets. If other people come, there is an internal mechanism to frustrate the newcomers. One mechanism might be to offer at significantly lower prices (P9, 232).

7 Discussion

The insights from the previous chapters will be discussed subsequently. The evaluation categories are again used for structuring, yet now insights from other categories can also be integrated into the analysis in order to obtain meaningful insights.

7.1 The transmission mechanisms – C.10

In accordance with the observations on administrative bribery (UNODC, 2019, p.13), bureaucratic corruption was reported to be the most common form of corruption. Most importantly, it was found that smallholder farmers are impacted whenever an actor in the value chain is affected by such corruption - directly or indirectly - which significantly broadens the analysis as well as the assumed effects of corruption.

The idea of retail and strategic-level corruption (Page and Okeke, 2019, pp.5–6) is extended into three levels, differentiating the former strategic level into a higher “strategic level” (e.g. policy formation) and a lower “operational level” (implementation) and retains the idea of the retail level (interpersonal interaction) with the designation “tactical level”. These observations do not change the effects of the strategic and operational level on smallholders assumed be tangible in lost opportunities (and loosing of thrust), as also reported in Page and Okeke (2019, p.5). However, the strategic level relates to political corruption, rather than bureaucratic corruption, which is beyond the scope of this research. There are also some general insights into the effects of retail, or tactical -level corruption. Finding that wealthier farmers are better positioned to use corrupt practices to their (undue) advantage in the access to support services and the increased vulnerability of the poor to bribery and extortion contribute to the understanding of the reproduction and accentuation of existing inequalities through corruption (Jongsung and Khagram, 2005, p.154).

There is some support for a self-seeking principal (Lambsdorff, 2001, p.32) by the idea that governance is seen and used as an avenue for enrichment by political elites. A reported lack of information and impact evaluation supports the idea of “inefficiency by design” (Lambsdorff, 2001, p.32) and the failure of the "watchdog" function of politics and bureaucracy (Dahlstrom and Lapuente, 2017, p.9). On the other hand, inefficiencies, insufficient capacities and mismanagement reported to hinder funds, projects and targeted beneficiaries, support the assumption of a benevolent principal unable to increase public welfare (Lambsdorff, 2001, p.2).

7.2 Dependencies and government failure – C.1

Exacerbated by the lack of market and price information, the lack of infrastructure results in a dependency on middlemen. Due to the perishable nature of their produce, farmers are also at the mercy of processors, or buyers/ intermediaries in general, which is aggravated by a lack of bargaining power due to a lack of cooperation and coordination. These dependencies result

in unfavourable power relations, inhibiting market functionality (Arias et al., 2013, p.11).

The government was found to play an essential role for smallholders. The red tape and policy failures already found in (Banful and Olayide (2010, pp.6–7) as well as mismanagement prevent accessibility and availability of fertilizer, land and funds, credits and licenses as well as infrastructure. Furthermore, there is a recurring media portrayal of inputs that never reach farmers as well as falsified figures and, most relevant to this work, the opinion, that the highest bidder is the one receiving governmental services. In contradiction to these observations, one interviewee opines that the government is not playing any significant role in the market access of smallholders, since he or she cannot get much from a governmental agency. This contradiction might be explained by a narrower perspective on market access, as a concept only related to transporting and selling produce on markets.

What C.1 punctuates, is the role of the state for smallholders' market access. Whether it is road-, market- and other infrastructure, fees, licenses, extension services, or credit and fertilizer access, the state seems to be essential to facilitate market access not only through an appropriate institutional setting (Arias et al., 2013, p.11) but also by administrative and support services, required to strengthen the resource base and technology (ibid.) of farmers.

7.3 Extortion rather than bribery – C.2

In line with the high contact rates observed by (UNODC, 2019, p.22) the interviewees report that bribery is experienced by every farmer in their lifetime. The latter and the reported increasing legitimization shows the relevance of bribery to the farmers' daily lives.

The interviews also address the inherent problem of the differentiation between extortion and bribery. In the principal agent approach these expressions are differentiated by the initiator of the corrupt transaction (Szántó, Tóth and Varga, 2012, pp.160–161), rather than by “consensual” or “the use of threat” as suggested by Page, 2018 (pp.17–24). The interviewees clarify this point by emphasizing that in most cases bribery in Nigeria is not consensual, but rather an imperative in order to receive any (governmental) service. This shows that what is often called bribery actually represents cases of extortion. Such occurrences may not only include straightforward “threats” as understood by UNODC (2019, p.36), but also for instance a farmer paying for a service he or she would actually be legally entitled to (Szántó, Tóth and Varga, 2012, pp.160–161). These explanations contribute to understand, why one interviewee opines that there is no reason for farmers to bribe, except security officials – subject to bribery being differentiated according to initiator.

As aforementioned wealthier market participants use corrupt practices, here bribes, to be favoured in the distribution of essential inputs, like tractors or fertilizer. It is described as very common and therefore not only relevant to the reproduction and accentuation of existing

inequalities (Jong-sung and Khagram, 2005, p.154), but also to understand bribing behaviour subdivided according to socio-economic characteristics (UNODC, 2019, p.56). The increased competitiveness of wealthier market participants affects the market orientation (Arias et al., 2013, p.11) of smallholders, since lower product prices of competitors changes the trade-off between high transaction cost (ibid.) and envisaged returns. Additionally, the distribution of services might not only be skewed towards these wealthier market participants, but the assumed coercive nature of most cases of bribery might further deprive the not so fortunate smallholders from these governmental services essential for their resource base (ibid.).

7.4 Transport, Market and Services C.3

7.4.1 Uncertainty and costs on the road – C.3.1

All interviewees agreed on the occurrence of extortion by various actors at road checkpoints, which confirms the description of Laminu Mele and Mai Bello (2007, pp.440–441), who also describe the inevitable character of the payment (ibid.) reported by the interviewees. This is aggravated by reports that officials might even set the fault themselves. The increased spoilage of produce due to delay (CBI, 2020, p.25) caused by searching, bargaining, arrest, detainment or traffic jams (caused by checkpoints) were found to be an integral part of the coercion to pay. The imbalance of power (Laminu Mele and Mai Bello, 2007, pp.440–441) is aggravated by possible threats of violence, arrest or detainment, which result in what can be described as a protection payment, in order to avoid harm to the life and freedom of the respective person. The cost aspect mentioned by Maur and Shepherd (2015, p.80), is reported to accumulate from extortion, delay and spoilage. Beyond the direct involvement of smallholders, respondents add the role of middlemen who pass on the costs of extortion to the smallholders who depend on them. Wealthier market participants such as companies can avoid delays and spoilage by making larger upfront payments to ensure undisturbed passage for their transporters. This secures them a major advantage over smaller market participants and contributes to increasing inequalities (Jong-sung and Khagram, 2005, p.154) among market participants.

The uncertainty and secrecy differentiating corrupt transactions from taxation (Shleifer and Vishny, 1993, p.612) are somewhat reduced by the fact that this example of extortion has become institutionalized in Nigeria, which means that it is not only very common and conducted openly, but the extorted amount seems to be predictable. The extorted person may even receive change and such costs were reported to be calculated before departure. Such observations contrast with reports of arbitrary amounts collected and the large discrepancy between the indicated amounts. This may be explained by a reported pricing mechanism based on the percentage of the total value transported. The assumed predictability has implications for the distortive nature of corrupt transactions explained by Shleifer and Vishny (1993, p.612), since transaction cost may be decreased by less secrecy and uncertainty. However, the predictability

of costs could be offset by the uncertainty concerning reported detention, etc., again with costs to be considered. In any case, a distortion of economic decisions (Case, Fair and Oster, 2012, p.402) is observed since it is reported that smallholders tend to sell in their communities or avoid selling in markets because of the extortion and costs involved, which corresponds to Arias' et al. (2013, p.11) identification of transaction cost as deterring factor to market orientation, or connectivity to markets. The extent of this factor becomes even clearer when considering that not only five out of seven reported checkpoint frequencies are higher than the highest previously found (HRW, 2010, p.30), but also because the (by far) highest frequency was reported for market days in particular.

7.4.2 Taxation and extortion – C.3.2

What Page and Okeke (2019, pp.5–6) describe as extortion connected to inspections, predatory taxation and customs corresponds to the interviewees' contributions on extortionist practices on markets. Several kinds of taxation on markets may be classified as predatory since its legal nature can be doubted. Furthermore, the interviewees found that such extortion is a daily phenomenon and can even be considered as a norm. Multiple taxation adds to the burden of smallholders. Taxation by federal, state or local tax collectors is often of questionable legal nature, as the taxes are seemingly not invested and intimidation methods used. Besides, traditional or customary authorities transgress their legal honourable roles by collecting taxes as well. Adding to the coercive nature are protection payments, which are made to avoid livestock being confiscated or declared unfit to be sold. Given the high frequency of such incidents and the fact that even farmers selling on the ground are subject to such extortion, the previous conclusion about the deterrent effect of "taxation" and thus market connectivity and orientation applies - farmers are discouraged from selling on the market.

7.4.3 No money, no service – C.3.3

The assumption of discrimination against the poor in access to public services through corruption (Jong-sung and Khagram, 2005, p.154) is not only confirmed, but the reported extend is higher than what was expected on the basis of Ladele and Fadairo (2013, p.45). Extortion is described to take place in public service delivery in every office through excuses and threats to either postpone, delay or not deliver a particular service, such as several licenses and certificates. These expenses may be best captured under cost of compliance (Arias et al., 2013, p.20) hindering market orientation. Licenses and reported extortion in the court system particularly relate to the institutional settings (ibid.) and structural constraints (ibid., p.21), in which extortion hinders the adherence to legal requirements and thus represents a significant barrier to enter the formal economy. The fact that people may even borrow money to make these payments describes the coercive nature of such situations. Adding to the latter is the observation, that bribery is not only present in credit distribution (Ladele, Oyelami and Balogun, 2015,

pp.31–32), but also that it is a condition for credit (or fertilizer etc.) access and therefore of coercive nature. The fact that the potential guarantor, the local chief, may even demand a bribe or refuse his services reinforces this factor. Bribes for extension services are also reported to be equally imperative to ensure service delivery. These processes have a severe impact on the resource base (Arias et al., 2013, p.11) in terms of resource- (soil fertility, land), and financial constraints (credit) and technical efficiency (ibid., p.21) related to fertilizer, land access, credit and extension services (as shown in Table 2) of smallholders, as they lack the access to such services from sources other than the government (Kirsten and van Zyl, 1998, p.555).

Apart from only constraining service access, such extortion might be detrimental as well. Protective payments against land seizure as well as fees collected during construction processes hamper land tenure or access. Beyond extortion of herders by local chiefs, it is reported that extortion is indulged in order to prevent police and army from taking sides in the farmer-herder dispute, which fuels conflict and its multiplier effects on economic activities, such as the hindrance of business transactions as well as physical movement - also through an increased occurrence of vigilantes and checkpoints. This provides further insights into the effect on what is referred to as civil conflict under risk factors (Arias et al., 2013, p.11).

7.5 Lost opportunities – C.4

While the previous chapters largely covered retail corruption as explained in C.2, the following observations on operational (former strategic) corruption fall within what was described as a corrupt agent (the bureaucrat), adversely affecting the principal (the government) (Szántó, Tóth and Varga, 2012, p.161) and the client (farmers) (Page and Okeke, 2019, p.6). Misappropriation of funds as mentioned in Ladele, Oyelami and Balogun (2015, pp.31–32), can again be interpreted in terms of forgone opportunities (Page and Okeke, 2019, p.5) for smallholders. This argument is taken up similarly by the interviewees who describe the diversion of funds for infrastructure with its multiplier effects considering the dependencies of smallholders as aforementioned. Embezzlement, which continuously impacts the provision of basic amenities at markets, discourages farmers from selling there. Rural development is hampered by misappropriation and diversion as well as by the case of ghost workers where tasks are only completed on paper - another case of lost opportunities. Thus, such corruption affects the resource base (government support) and the market functionality through its impacts on infrastructure and therefore power relations (dependencies) (Arias et al., 2013, p.11). In addition to that, embezzlement at the strategic level was found to increase incentives for it at the operational level, which again incentivises the creation of corruption opportunities at the tactical level. This multiplier effect is exemplified by the security sector, the weakening of which produces the aforementioned effects of insecurity. Most significantly this effect reinforces the occurrence of other forms of corruption.

7.6 Like a lottery ticket – C.5

Contract fraud has been cited for instance with regard to contracting with ineffectual companies (Banful and Olayide, 2010, pp.6–7) and shadow partners (Moris, 1991, p.86). One interviewee assumes that such frauds may not be directly linked to smallholders, which is particularly true for cases of lost opportunities (Page and Okeke, 2019, p.5). This applies for a variety of essential infrastructure or construction projects, where contract fraud for instance during the bidding and awarding process, results in projects that are abandoned or completed in substandard quality. Since the latter was reported to even worsen the situation – as in the case of abandoned road constructions – it goes beyond lost opportunities, since such substandard completion may even have a detrimental effect on farmers. This contributes to the understanding of inflation and low-quality goods provision due to corruption (Blackburn, Bose and Haque, 2011, p.425) and aggravates the previously found effect on market functionality (Arias et al., 2013, p.11). This detrimental effect was also observed for (ADP) service quality by Ladele and Fadairo (2013, p.45) as well as Fink (2002, pp.1–5) who adds high prices and undelivered goods as possible outcomes. These observations are confirmed for several inputs such as seed, fertilizer and equipment. It was even reported that farmers were expected to pay for unnecessary quantities of materials supplied. Most importantly fake and substandard inputs may even harm beneficiaries instead of just being another lost opportunity. It affects the resource base (soil fertility, technical efficiency) and market orientation (product quality) (Arias et al., 2013, p.13), due to fake seeds and substandard inputs.

The interviewees essentially contribute by observing the extent of contract fraud, which is seen as a “lottery ticket” without responsibility. Small as well as big equipment offer opportunities for corruption and either way lead to inflated, inappropriate or substandard input delivery. Auditors or possible internal opposition was found to be settled or fired respectively. These findings contribute to the understanding of various failures of the government to assist smallholders. It seems as if most contracts issued by the government are affected by corruption either for self-enrichment, or for reasons of political patronage. The abolishment of the e-voucher based distribution has worsened the situation as authorities are again in charge of the allocation process, which emphasises the relevance of the previous findings. The assumption that the GESS has been continued (see: chapter 4.2.3) seems to be only partially true. It might only be safe to say, that the scale of the e-voucher based distribution has been reduced or abandoned in various places.

7.7 Inability and inefficiency by design – C.6

The previous findings on the e-voucher system apply for contract fraud as well as for subsidy abuse. The reported diversion of funds partially by means of fake farmers (Page and Okeke (2019, pp.23–25) is in line with the interviewees’ reports. Particularly inhibiting is the reselling

of fertilizer by bureaucrats, their cronies and fake farmers which renders the programme devoid of any effect, as fertilizer reaches the farmers at market price. The distribution mechanism of (already scarce) inputs is generally prone to diversion due to political reasons, family ties, or personal enrichment to the bureaucrats' cronies. These cases correspond to indications derived from the literature (Ladele and Fadairo, 2013, p.45; Banful and Olayide, 2010, pp.6–7). In addition to this diversion, the prices of subsidised fertiliser are also inflated in the direct distribution – complaint mechanisms have been described as unavailable. The assumption that corruption creates incentives for distortions (Méon and Sekkat, 2005, pp.71–74) are supported as it was found that bureaucrats deliberately make the process cumbersome so that farmers do not come and they can sell fertiliser at inflated prices to the more solvent market traders. As reported by Ladele, Oyelami and Balogun (2015, pp.31–32) diversion of funds was reported in credit allocation. Beyond personal enrichment and favouritism these funds go to private farms assumingly providing undue advantages to the smallholders' large-scale competitors. The assumption that subsidy programmes are usually designed to favour a certain group supports the assumption of an “inefficiency by design” (Lambsdorff, 2001, p.32), while the reported replacement of beneficiaries as well as the aforementioned cases rather support the case of a principal unable to control the agents (Lambsdorff, 2001, p.2). Subsidy abuse thus particularly affects the resource base of smallholders, due to the effect on government assistance regarding fertilizer (soil fertility) (Arias et al., 2013, p.11).

Vulnerable groups and women are particularly prone to missing out on access opportunities due to corruption. This was not observed in UNODC (2020b, p.34), but seems particularly problematic and was only one more time observed in C.7.

7.8 Distribution and allegiance – C.7

There are a variety of supportive indications for the patron-client relationship assumed on the basis of You (2015, p.25). Beyond the usage of contract fraud to secure political allegiance, the distribution of governmental services and appointments seems to be skewed towards groups in favour of the government, based on regionality, ethnicity or religion. Such assumptions were already derived from Amundsen (2019, pp.17–18) and Moris (1991, p.86) and support the distributional rather than accumulative consequences observed in Amundsen (1999, p.14). Beyond politics, families, ethnicity etc. (Page, 2018, p.22) the interviewees extent favouritism to be based on gender, age, behaviour and even appearance. In particular it seems to act as a reinforcing and motivating factor, especially within subsidy abuse and contract fraud. Connections are reported to be decisive to receive services (e.g. credit, fertilizer), rather than due process. Both aspects have severe distributional consequences - much stronger than what was expected from the literature such as Ladele, Oyelami and Balogun (2015, pp.31–32) and UNODC (2019, pp.67–69). The distribution and economic implications of such corruption may

only be captured when considering the prosperity of certain regions or particular smallholder groups, for whom the previous findings on the resource base and market functionality (Arias et al., 2013, p.11) apply. There are some reports of the north, being better off in terms of agricultural development, which would be in line with ethnic and regional favouritism related to the ruling party.

In fact, the effect of favouritism may only be excluded for selling and buying itself, where such connections do not play a role. However, the political exploitation of divisions within the informal workforce seems to fuel divisions extending to the business sphere as well.

7.9 Creating opportunities for corruption – C.8

As already emphasised by (Page, 2018, pp.17–24) abandoned projects derive their particular relevance from the fact, that they create opportunities for corruption. As such, the effects fall within what was already explained in C.5 with regard to the detrimental effect of abandoned projects as well as lost opportunities. While the strong effect on a variety of infrastructural projects is of particular relevance for smallholders, the effects of deliberate waste were even found to extent to the service provision of the government. Therefore, particularly the resource base (government support) and market functionality (infrastructure) (Arias et al., 2013, p.11) seem to be affected. Deliberate waste and abandoned projects seem to be very common, whereby its effects, except from the abovementioned, are limited to the extent to which it prolongs and furthers opportunities and thus effects of other corruption tactics.

7.10 No land for the poor – C.9

One interviewee opined, that there is no transmission mechanism for legalized corruption to affect smallholders. This may hold true for high salaries for senators, as the idea that this money might go into projects for farmers might be a little bit farfetched. If high salaries concern consultants or certain officials within a particular programme, this might be considered an investment, which could potentially go to farmers. Of higher relevance is the contribution of land grants to the reproduction and accentuation of existing inequalities (Jong-sung and Khagram, 2005, p.154). The prevailing land act facilitates that land is given to cronies or political allies. This leads not only to the usage of derelict land by smallholders, but also contributes to the undue advantages of large-scale farms often owned by politicians. This constrains the resource base (land), aggravates power relations and thus affects market functionality (Arias et al., 2013, p.11) for farmers. While one interviewee argues that land grants do not concern smallholders because of the prevailing system of heritage, another portrays land as a problem in the context of high requirements for smallholders to obtain land. Such requirements might be particularly important for farmers who want to scale up. The insights from Nwalem et al. (2016, p.1), where the majority reported problems with land tenure or access, allows for the conclusion that other mechanisms are constraining access to land. Extortion for instance was

found to aggravate the bureaucratic processes when trying to obtain a CofO (see: C.3.3, P11, 95).

7.11 Sharp practices – C.11

Within the definitional scope of this work derived from (Kiener-Manu, 2019), the interviewees only reported adulterated chemicals, that are sold by the private sector with government involvement. This case cannot be sufficiently elaborated due to missing clarifications in the data, but it seems as if the explanations fall within the provision of substandard inputs – the previously explained effects apply. The outsourcing of waste management and the following exploitation is not directly relevant to market access. However, it takes up available working capital (Arias et al., 2013, p.21) of smallholders. This is a rather indirect effect, which might not be directly related to market access (e.g. in comparison to credits for agricultural purposes).

Other explanations in the private-private sphere include subsidy diversion within cooperatives, bribery for information, misappropriation of received fertilizer by farmers, as well as grouping and favouritism among sellers.

The latter may be fuelled by political interest as mentioned in chapter 6.8 (P4, 163) and can, under such circumstances, be the outcome and indirect effect of favouritism. Generally, such “sharp practices” need to be investigated further, as in Ladele, Oyelami and Balogun (2015, pp.31–32), with an appropriate theoretical framework to capture meaning and effects accordingly.

7.12 Results table

Table 5 represents an attempt to partially capture the results in a short version. The “factors” are a result of the corruption tactic and result in an “effect” on the smallholders and the respective market access determinants. The “factors” are certain aspects that represent forms of hindrances to the specific market access determinants, which are called “resources” here.

Service related factors (see Table 4) relate to governmental services for the respective resources. Consequently, corruption in such a service provision has a negative impact on smallholders. This impact is captured as “effects” and could for example increase cost from corruption related to receiving a particular resource from the government.

The second set of factors do not relate to services, but hinder access to resources in other regards. “Payment unrelated” and “Protection payment” occur in the access to a certain resource and can be traced back to certain corruption tactics. Resources access is a special case, as it relates to the corrupt practice affecting the resource accessibility directly. This occurs in indirect effects (information), or in the case of land, which is vested in the state.

Due to the complexity of the table one factor and effect should be exemplified. Subsidy abuse

results in a reselling of the resource “fertilizer”, which increases the costs of fertilizer for smallholders. It also results in an effect on service access which generates further costs. It results in an unequal treatment in the service for fertilizer (distribution), which provides an undue advantage to the competitors. Lastly subsidy abuse results in a negative effect on the service availability and therefore lost opportunities for smallholders.

Table 4 Terminology of the results table

Terminology		Explanation	
Factors	Service related	Service access	The access to the government service of the respective resource is affected (the service is actually available).
		Service quality	The quality of the government service of the respective resource is affected.
		Service availability	The availability of the government service of the respective resource is affected (the service is not available in the first place).
		Reselling	This relates to the reselling of resources (services) actually meant for smallholders.
		Unequal treatment	This relates to any unequal treatment or favouritism in governmental service provision.
	Service unrelated	Payment unrelated	This relates to any money paid in connection with a certain resource, where there is no reference to a service, which could be required by the smallholders (e.g. road extortion, illegal “taxation”).
		Resource access	This relates to the question, if the access to the respective resource itself (not the government service) is affected.
		Protection payment	A protection payment relates to a payment made in order to avoid negative consequences for one’s own safety, freedom or property. It always entails cost, while the effect on the resource is mostly detrimental.
		(Transaction) cost	Relates to any cost arising from a factor. Note: Costs can always represent lost opportunities, if a smallholder may not possess the necessary means to settle the payment.
		Lost opportunities	Relates to any lost opportunities for farmers. If a service for instance is not available, there are no direct costs arising for smallholders, but it could have been beneficial if it had been available.
Effects	Detrimental	Relates to any negative effects on farmers not directly tangible in cost. It might either be a direct effect on the farmers such as protection payments, or a service that worsens the situation of farmers (service quality). Costs usually occur indirectly (transport cost due to mud road).	
	Undue advantage	Undue advantage relates to the competitors (usually large-scale farmers) of the smallholders. It always applies, when a corruption tactic results in an undue advantage for these competitors, for instance due to unequal treatment.	

Source: Author's compilation.

For Table 5, the market access determinants of Table 2 have been adapted according to the insights from the interviews. All categories related to corruption have been considered. In consideration of the pre-assumptions, derived from the interviews (Chapter 6.2: P3, 6; P6, 11; P5, 8. Chapter 6.4.1: P11, 68), the table should be read as suggested in Table 4 and the notes of Table 5. The assumptions should be born in mind when reading the table. A direct visibility of pre-assumptions in the table is only true for “negative effect on transport and road result in information hindrance” (transport and road logically refer to the respective market access determinants) and “negative effect on information results in transaction cost/ cost”. The resulting effects are captured just as the assumptions from generalized interviewee statements in *grey italics*.

Abbreviations	Factors: Service related		Factors: Service unrelated		Effects		Pre-assumptions: negative effect on...					
	Service access	Access	Payment unrelated	Unrelated	(Transaction) Cost	Cost	...Transport results in cost transmission by intermediaries ⁹					
	Service quality	Quality	Protection payment	Protection	Lost Opportunities	Lost	...Road results in increased dependency on intermediaries ⁹					
	Service availability	Availability	Resource access	Resource	Detrimental	Detrimental	...Transport and Road results in information hindrance ⁱ					
	Unequal treatment	Unequal			Undue advantage for competitors	Advantage	...Information results in Transaction cost/ cost ^j					
Reselling	Reselling											

Table 5 Results table

Resources/ Market access determinants		Corruption categories												
		Corruption general	Bribery	Extortion transport	Extortion market	Extortion service	Auto-corruption	Contract fraud	Subsidy abuse	Favouritism	Deliberate waste	Legalized corruption	Private corruption	
		C.10	C.2	C.3.1	C.3.2	C.3.3	C.4	C.5	C.6	C.7	C.8	C.9	C.11	
Smallholder characteristics	Credit	Factor	Access	Access			Access Availability			Availability Unequal	Access Unequal		Availability	
		Effect	Lost	Cost			Cost Cost ^c			Lost Advantage	Lost Advantage		Lost	
	Fertilizer	Factor	Availability	Unequal			Access	Availability Unequal	Availability Unequal Quality	Reselling Access Unequal Availability	Unequal Access	Availability	Availability	Quality
		Effect	Lost	Advantage Lost			Cost	Lost	Lost Lost Detrimental	Cost Cost Advantage Lost	Lost	Lost	Lost	Detrimental
	Water	Factor	Availability						Availability		Unequal	Availability		
		Effect	Lost						Lost		Lost	Lost		
	Land	Factor		Access			Access ^e Protection						Resource Unequal	
		Effect		Cost			Cost Detrimental						Lost Advantage ^b	
	Conflict/ security	Factor	Availability				Protection ^f	Availability						
		Effect	Detrimental				Detrimental	Detrimental						
	Knowledge	Factor	Availability				Access					Availability		
		Effect	Lost				Cost					Lost		
	Equipment	Factor	Unequal Availability	Unequal			Access		Quality	Reselling Unequal	Unequal Access	Availability.		
		Effect	Advantage Lost	Advantage Lost			Cost		Detrimental	Cost Lost	Lost	Lost		

Abbreviations	Factors: Service related	Factors: Service unrelated	Effects		Pre-assumptions: negative effect on...		
	Service access	Access	Payment unrelated	Unrelated	(Transaction) Cost	Cost	...Transport results in cost transmission by intermediaries ⁹
	Service quality	Quality	Protection payment	Protection	Lost Opportunities	Lost	...Road results in increased dependency on intermediaries ^h
	Service availability	Availability	Resource access	Resource	Detrimental	Detrimental	...Transport and Road results in information hindrance ⁱ
	Unequal treatment	Unequal			Undue advantage for competitors	Advantage	...Information results in Transaction cost/ cost ^j
	Reselling	Reselling					

Cont.		C.10	C.2	C.3.1	C.3.2	C.3.3	C.4	C.5	C.6	C.7	C.8	C.9	C.11		
Connectivity to markets	Market orientation	Transport	Factor	<i>Availability</i>	Unrelated	Unrelated Unequal Protection									
			Effect	<i>Lost</i>	Cost	Cost Advantage ^a Detrimental									
		Information	Factor	<i>Resource</i>	<i>Resource</i>	<i>Resource</i>			<i>Resource</i>	<i>Resource</i>		Unequal	Resource		Resource
			Effect	<i>Cost</i>	<i>Cost</i>	<i>Cost</i>			<i>Cost</i>	<i>Cost</i>		Cost	Cost		Cost
		Seed	Factor	<i>Availability</i>				<i>Access</i>	<i>Availability</i> <i>Unequal</i>	Unequal Quality	Reselling <i>Access</i> <i>Availability</i>	<i>Unequal</i> <i>Access</i>	<i>Availability</i>	<i>Availability</i>	
	Effect		<i>Lost</i>				<i>Cost</i>	<i>Lost</i>	Lost Detrimental	Cost <i>Cost</i> <i>Lost</i>	<i>Lost</i>	<i>Lost</i>	<i>Lost</i>		
	Storage	Factor	Availability												
		Effect	Lost												
	Certification	Factor					<i>Access</i>								
		Effect					Cost								
Market functionality	Institutional setting	Road	Factor	Availability				Availability	Quality Availability			Quality Availability			
			Effect	Lost				Lost	Detrimental Lost			Detrimental Lost			
		Market	Factor						Availability	Availability			Availability		
			Effect						Lost	Lost			Lost		
		Electricity	Factor	<i>Availability</i>						Availability			Availability		
	Effect		<i>Lost</i>						Lost			Lost			
	Legal	Factor					<i>Access</i> ^d				Unequal ^d				
		Effect					Detrimental				Detrimental				
	Market	Selling	Factor				Unrelated Protection								
			Effect				Cost Detrimental								

Source: Author's compilation. Notes: If a "factor" is affected by corruption, the effect is always found in "Effect" below. If either the row for "effect" or "factor" contains a different number of indications than its counterpart, they are all connected (e.g. one factor affected could trigger two effects). If the number of indicators in both rows is the same, then each indicator refers to its counterpart in the bottom row according to the sequential order. Assumptions derived from generalizations are marked in *grey italics*. ^aupfront payments (to headquarters, for checkpoints). ^baccess to land. ^cregistration for non-existing credits. ^daccess to justice. ^eaccess to CfOs. ^fto security forces. ^gsee: P11, 68. ^hsee: P3, 6; P6, 11. ⁱSee: P11, 68. ^jSee: P6, 11, P5, 8.

8 Critical reflection

8.1 Quality criteria of qualitative research

Mayring (2016, pp.144–145) has determined six general quality criteria of qualitative research. The point of procedural documentation has been sufficiently addressed, considering that most of the crucial points have already been explained in this chapter. At the beginning of the next chapter, further explanations regarding the procedure can be found. All steps should be comprehensible, incorporating the illustrations in the appendix. The argumentative interpretation validation (ibid., p.145) was satisfied in chapter 7, where the research results were interpreted to the best of the authors' knowledge on the basis of theoretical assumptions. Explanatory and argumentation gaps have been tried to be explained on the basis of the aforementioned assumptions as well as the data respective data context. The rules-based nature of the work (ibid., p.145-146) was ensured by following the models of Mayring (2014, 2015) (see chapter 5). While no systematic adjustments were made, the author of this paper adjusted the reference system between transcript-summary table and summary table-empirical part. This has already been described and justified in chapters 5.5 and 6. Proximity to the object (Mayring, 2016, p.146) was very difficult to fulfil. Due to the restrictions in the context of covid-19 all interviews were conducted online. A convergence of interests with the researched (ibid.) was at least approached. An increased number of open introductory questions seemed to support the interviewees in feeling comfortable with the situation despite the distance and the quite structured guideline. In most cases, interests seemed to coincide, although such convergence did not always seem to succeed. Unfortunately, there were no opportunities for communicative validation (ibid., p.147), since it already required enormous time resources to collect the interviews in the first place, a second revalidation of data was not possible. Triangulation (ibid., pp.147-148) was not fully conducted, majorly due to time constraints as well as data protection (e.g. the inclusion other researchers). However, the data was processed both deductively and complementarily inductively. Furthermore, when considering Gläser and Laudel (2009, p.117), who suggest that triangulation can already take place when gathering information on one topic from several interviewees, this was adhered to with 12 interviewees.

8.2 Subjectivity, categories and gender bias

The difficulty in extracting expert knowledge can be that subjective attitudes are wrongly assumed to be facts and are treated as such. In the end, the reported causal connections and mechanisms are rather subjective theories of the interviewees (Gläser and Laudel, 2009, p.248). Therefore, they bear the risk of representing political, or religious sentiments and opinions, which are treated as facts. The author of this work realized some answers, which could be hints towards such tendencies. The danger of incorporating such tendencies into the conclusions was compensated in the reduction/ paraphrasing process by consulting theoretical

pre-considerations as suggested for cases of doubt (Mayring, 2014, p.68). The latter subjectivity bears another issue, which was already mentioned. The experts are not “object” of the analysis but rather a “medium” or “witnesses” (Gläser and Laudel, 2009, p.12). As a result, when asking about situations in the daily lives of smallholders, the researcher has to rely on the interviewees’ subjective interpretations and conclusions thereof. In this research it was attempted to reconstruct a certain process, for which these experts have a special or even exclusive position. The thoughts, opinions and feelings of experts were of no interest for the investigation – only when they influenced their explanations (ibid., pp.12-13). Thus, this was certainly the most significant issue to overcome.

Categories are at the heart of a qualitative content analysis (Mayring, 2015, p.51). Therefore, these have been intensely analysed by the author. Mayring (2014, p.104) suggests an inductive adaptation of the deductive categories, if the extracted material is too extensive. During the process of this work there have been various attempts to subdivide the relatively broad categories. In the process five new categories were built. Further subdivision of categories might have been beneficial. However, the author repeatedly observed a loss of context and data, which is why the categories were left relatively broad, while they were subdivided, integrated and newly ordered for the section of empirical results of this works.

The biased gender balance was already mentioned and represents a serious issue. Of course, expert knowledge could be assumed to be “neutral” in character, but this attitude might be a little bit too positive. Women may not necessarily raise issues related to women – as was also observed among the interviewees, but just to draw a comparison to the representation of women, it was observed that women at the elite level were more likely to reflect the interests of women at the mass level (Campbell, Childs and Lovenduski, 2010, p.194). Assuming the same for the interviews, the skewed distribution of only two women among 12 interviewees might have created a serious data gap on a variety of issues.

9 Conclusion

Before proceeding to the individual questions, the general conclusions from the results table should be considered. As presented in Table 5, corruption on the operational (former strategic) level majorly results in lost opportunities and cost arising from the access or availability of governmental services – related either to inputs (such as fertilizer), or bureaucratic requirements (licenses). If the service quality is affected (roads, farm inputs) this usually results in detrimental effects on the production of smallholders. Thus, the corruption affected services even worsens the situation for the farmer, instead of just being another forgone opportunity. Unequal treatment, or favouritism present in most corruption forms, usually result in lost opportunities for smallholders and undue advantages for their competitors. Reselling of (subsidized) governmental resources increases the cost of that service for smallholders, who then

receive it at market price. Protection payments create a threat for property (land/ livestock) and life (threats at checkpoints) of smallholders, if they do not pay. It also occurs, that a certain corruption tactic affects the resource accessibility itself (land), which means, that the resource access itself is directly affected and not indirectly – as in the case of governmental services. Lastly, unrelated payments mostly occur on the market (illegal “taxation”) and the road (ensure passage at checkpoints) and usually occurs as extortion, unrelated to a particular service.

Before coming to the answer of the research question of this paper, the sub-questions might be beneficial for further insights into a general conclusion. The question “What are the transmission mechanisms of particular forms of corruption to smallholders?” were majorly answered in the theoretical chapters and extended by the empirical results. Contributing to the understanding of the transmission mechanisms, it was observed that corruption may be separated into three levels – a strategic, an operational and a tactical level. The first two levels, but primarily the operational level as it clearly relates to the bureaucratic tier, can either be interpreted as lost opportunities for smallholder farmers, or they can even have a detrimental effect on farmers because of the inadequate quality of services and infrastructure. The tactical level manifests itself through high cost and transaction cost aggravated through unbalanced power relations between smallholders as sellers (and buyers) on the one side and civil servants as well as buyers on the other side. Such power imbalance stems from possible detainment, threats etc., in the case of civil servants and from dependencies due to remoteness, infrastructure and produce characteristics in the case of buyers.

The next question “Where does corruption happen in the daily lives of smallholders?” may provide further insights into the daily situation of farmers. There are particular places where corruption occurs with the direct involvement of smallholders. For instance, at places essential to obtain certain necessary services such as offices of civil servants (licenses/ certificates), distribution centres (fertilizer/ seed/ equipment) and banks or offices (loans/ credits). Furthermore, the farmer may be confronted with certain “taxation” or extortion on his/her farm, or on the market. Lastly, the farmer, or middlemen are confronted with extortion on the road.

There was particularly one finding, that contributes to the understanding of bribery and why it represented a very small share of codings. The interviewees clarified that what is often referred to as bribery is in fact extortion. Bribes are imperative to a variety of situations in the daily lives of smallholders. Interestingly, it turned out that the definition formulated for the platform question in the Interview guideline became largely irrelevant, as most interviewees described situations that, particularly according to the principal agent approach, depicted situations of extortion - e.g. paying for a service that should actually be (legally) free of charge.

Thus, the research question “How does bureaucratic corruption affect the market access of smallholder farmers in Nigeria?” can be answered on the basis of the latter observations and

the used framework for market access. On the resource base, the farmers are constrained by deliberate waste, in terms of water (boreholes, irrigation) and by legalized corruption in terms of land (land grants), which is also constrained by extortion (protection payments, licenses/ CofOs) with regard to land. It is further constrained in terms of credits (financial constraints), equipment (technical constraints) and fertilizer (soil fertility) within the aspect of government programmes – often the only source of smallholders for such services. The efficiency of the latter is hampered on the operational (former strategic) level by auto-corruption, contract fraud, subsidy abuse and deliberate waste, which particularly results in non-delivery of services, sub-standard quality or inflated costs. Extortion in governmental service provision further reduces possible benefits from these programs particularly with regard to fertilizer, credits, seeds and equipment but also extension services (technical efficiency).

Licenses and certificates strengthen market orientation, through the fulfilment of institutional/legal requirements which facilitate the benefits of formal market participation. However, they are heavily constrained due to extortion in governmental service delivery.

Besides the resource base, the market functionality is decisive for the market orientation of smallholders. Contract fraud, deliberate waste and auto-corruption particularly inhibit infrastructure, which is the pivot of a functioning market for smallholders. Their produce characteristics and remoteness put them into an unfavourable dependency on buyers, which is strongly aggravated by infrastructural deficits (and the perishable nature of produce). The costs arising from the state of the infrastructure are compounded by the extortion on the roads. Here farmers are directly and indirectly affected, since they are confronted with transmitted price raises of their buyers, or with the costs themselves. This applies for extortion on the markets as well, where predatory multiple taxation generates costs for farmers either directly or indirectly. The decision to sell on the market is thus strongly influenced by extortion practices during transport and on the market. Either way, through intermediaries or direct engagement, the cost of extortion is always (partly) paid by the farmers.

The research also provides insights into the effect of corruption on reproduction and accentuation of inequalities. Extortionary practices were found to affect wealthier market participants to a lesser extent, providing them with an additional competitive advantage. These competitors may be better positioned due to their wealth and ability to secure undue advantages with bribery, but also with legalised corruption such as land grants. The ability of these market participants to offer goods at lower prices may eventually make selling on markets unviable for smallholder farmers. Beyond the latter, corruption has distributional aspects, which are relevant to smallholders' market access. Groups without connections of any kind to any official are severely disadvantaged in the access to governmental services, particularly in the input provision. Both aspects however require more research and a narrower focus, investigating

corruption (particularly favouritism) and the effects on individual groups of smallholders.

Corruption is listed among the risk factors for market access. From the discussions and empirical results, it can be concluded, that particularly extortion, bribery and favouritism represent a daily phenomenon for farmers and might therefore not be considered a risk factor, but rather a norm to be considered within every step of smallholders' market access.

Returning to the research question it can be established that corruption affects the smallholder farmers' market access through its impact on smallholder characteristics, especially in terms of resource base and technology due to the dependency on government services, impedes market functionality through its contribution to skewed power relations and moribund institutional settings, and finally imposes high costs and transaction costs as well as hindrances to formalisation that constrain smallholders' market orientation.

This paper was an attempt to take a first comprehensive look at the role of corruption for smallholder farmers' market access. It could and should be the basis for further research. Topics that clearly need further research are favouritism, private to private corruption and legalized corruption, the latter in particular requiring an appropriate theoretical framing. In this context, the land question is certainly of particular importance for smallholder farmers. Building on this work, it seems sensible and maybe even necessary to distribute a - perhaps partially standardised - questionnaire to a large group of smallholder farmers in Nigeria, not only to explore the extent of corruption, but also to find out whether the experts' statements stand the test of a survey of those actually affected. The results of this thesis could certainly serve as a basis for the questionnaire. The hope is, of course, that the insights gained from this and other works can be used by decision-makers to act appropriately to efficiently assist smallholder farmers in their pursuit of market access.

10 References

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Annex

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Annex I Summary tables

C.	P.	Nr.	Line	Paraphrase	Generalisation	Reduction/ Combination
C.1	P1	1.	46 52	- Market access challenges for smallholders in Nigeria include supply chain challenges with logistics of the movement of goods. There are challenges with access to roads and market infrastructure. Low literacy hinders the digitalisation, which may break some of the barriers of logistics. Additionally, social interventions by the government are sometimes not properly implemented.	Market access challenges include the movement of goods, whereas low literacy hinders digitalisation, which may break some barriers of logistics. Other challenges include road access, market infrastructure and improper implementation of social interventions by the government.	
C.1	P1	2.	79 92	- P1 witnessed situations in which funds were provided by a donor for an intervention with a set number of participants. If the number of participants is lower, the numbers are reported higher than they actually are. The same applies, for example, to the quantity of the harvest. The false figures are meant to create the impression that the intervention was successful. P1 witnessed situations where suppliers were linked to farmers not because of their qualification but for other reasons.	P1 witnessed situations where numbers of participants and yield of interventions were reported to be higher than the actual number. Such manipulated figures are meant to give the impression of a successful intervention. P1 also witnessed farmers being linked to input suppliers for reasons other than qualification.	
C.1	P2	3.	47 51	- In most cases basic infrastructure is the most important market access determinant. This is a basic requirement since most Nigerian farmers are located in rural areas, where the infrastructure has strong deficits. This even hinders the possibility of bringing the commodities to markets in the first place.	In most cases, the principal market access determinant is the availability of basic infrastructure, since most farmers live in rural areas with strong infrastructural deficits. This even hinders the possibility of bringing the commodities to markets in the first place.	<i>In most cases, the two most important determinants of market access are security and the availability of basic infrastructure. Since most farmers live in rural areas with severe infrastructural deficits, the transport of goods is fundamentally hampered. Insecurity makes physical access and business transactions even more difficult in some places.</i>
C.1	P2	4.	54 60	- There are some places where market access is constrained by the security situation, so that accessing or leaving markets, or even transacting business becomes a problem. Infrastructure and security are the two major market access determinants.	In some locations market access is constrained by insecurity, which substantially hampers physical access to markets and even business transactions. The two major market access	<i>Construction/ Integration in: C.1, P2: 47 - 51</i>

					determinants are infrastructure and security.
C.1	P2	5.	474 487	-	In a recurring pattern, supposedly purchased tractors and fertilisers are presented by the government in ceremonies and photo shoots and then the materials disappear. Sometimes these materials are only borrowed and presented for the sake of pretence.
C.1	P3	6.	72 77	-	Market access is affected by bad roads, transportation and the rural environment, where many farmers are located. Therefore, they are more depended on middlemen, who come to buy off their products to sell in urban markets.
C.1	P4	7.	44 47	-	The major constraints to market access are limited finance, ignorance, multiple taxation, high interest rates and the lack of credit schemes.
C.1	P5	8.	39 86	-	The market access is constraint by the prevalence of subsistence production, where the motivating factor is the satisfaction of household food needs. Transaction cost from infrastructure and search for information on the right buyers. Further constraints include missing information on prices, missing willingness to add value and long distances to markets. The farms, which are market oriented are located far away from the village and the roads are often not more than improved foot-paths. Thus, middlemen make the major profit by buying in bulk and transporting the commodities.
C.1	P6	9.	68 87	-	Smallholder farmers are scattered in remote solitary locations. They are confronted with climate change challenges, high transportation cost, limited market information, few business or entrepreneurial skills as well as the lack of bargaining power and resources due to the lack of organisation and pooling, for instance to transport produce. Furthermore, middlemen capitalize on the farmers.
					Market access is constrained by infrastructure. Many farmers live in rural areas, where they depend on middlemen who buy off their produce to sell it in urban markets.
					The market access is constraint by the prevalence of subsistence production and orientation as well as missing information on prices and missing willingness to add value. Transaction cost occur from search for information and infrastructure. The latter is of particular importance for market-oriented farms, that are located far away from the villages. Since roads are little more than foot-paths, middlemen make the major profit through buying off and transporting the produce.
					Market access constraints include the fragmentation of farmers in remote solitary locations, climate change challenges, high transportation cost, limited market information, lack of entrepreneurial skills as well as the lack of physical market access and bargaining power due to the lack of organisation and pooling of resources. Furthermore, middlemen capitalize

					on the farmers.
C.1	P6	10.	174 178	-	When there is a surplus of agricultural products and prices fall, the government does not support smallholders sufficiently.
C.1	P6	11.	246 256	-	If farmers are not able to bring their produce to market, they are at the mercy of the middlemen who determine the price. Farmers do not have enough market information to know the value of their produce, so they will sell their produce at the suggested prices. The latter sometimes happens even before the harvest, when the middlemen simply buy up per field or hectare. When farmers factor in all their costs, most of them will realise that they are producing at a loss.
C.1	P6	12.	391 416	-	Smallholders sometimes don't have access to certain benefits because of the fees from the government. The highest bidder takes what is coming from the government. When farmers bring their produce to the market there are some legal fees, which are collected by market guard associations and commodity associations. Even though they are legal, in some cases they are not receipted.
C.1	P7	13.	54 90	-	The market access is constrained due to the lack of price- ceiling and floor. Prices sometimes collapse due to production gluts caused by simultaneous harvesting. Farmers will then most times sell even below production cost. Since the government does not procure produce, farmers sell at the open markets and are thus at the mercy of the processors. Since the products are perishable, the processors can determine the price. Due to their position, the off-takers may come later than agreed so that the cassava tubers lose weight. They may be asked to bring produce to the processing outfit at an agreed price, while bearing the transportation cost. This price however may be renegotiated when they arrive. In addition, infrastructure, for instance in Benue, a major yam producing state, is in poor condition. Thus, the produce mostly spoils during transport, where there may even be car accidents or damage.
					Without a ceiling or floor, prices sometimes collapse due to production glut caused by simultaneous harvesting. Most times, farmers then sell below the cost of production. Since they sell perishable products on the open market they are at the mercy of processors, who can determine the price. They may be asked to transport the produce to the processing plant at their own cost. The agreed price may, however, then be renegotiated. Due to their position, the buyers can come later than agreed, so that the produce, for instance cassava tubers, loses weight. In addition, infrastructure, for instance in Benue, a major yam producing state, is in poor

					condition. Thus, the produce mostly spoils during transport, where there may even be car accidents or damage.
C.1	P7	14.	129 137	-	The fertilizer disbursement process involves a lot of bureaucratic procedures. By the time this process is completed, various time slots for fertilizer application may have passed. The output and quality of the produce and thus the income of the farmer is drastically affected.
C.1	P7	15.	145 196	-	The government and the central bank offer a variety of low interest agricultural loans to farmers. The credits are supplied through the banking system. Banks are usually not represented in rural areas and thus difficult to access. Apart from this, the farmers may have to provide unrealistically high collaterals such as a grade-level 16 or 14 civil servant income. Sometimes they ask the farmers to bring their traditional leader to guarantee for them. If the leader is not sufficient as a guarantor, the credits are usually given to businessmen, who will in turn give it to farmers at a high interest rate. They are close to farmers and require no collateral. They ensure payback through, for instance, a system of deity.
C.1	P7	16.	209 229	-	The timing of fertiliser distribution is often poor, due to the missing differentiation of policies between the climatic zones of Nigeria. Farmers thus receive fertiliser at a time when they do not need it. Farmers resell that fertilizer, since they may need the money and know they will receive fertilizer the year after.
C.1	P7	17.	375 394	-	To obtain a loan, farmers may be required to form a cooperative to provide some form of collateral. Additionally, they are usually required to provide a bank statement. However, most of these farmers cannot afford such an account. One of the reasons is the
					As collateral for a loan, farmers may be required to form a cooperative and provide a bank statement. Thus, usually only business farmers have a cooperative account, as other farmers

				distance to any banks, and the insecurity on the roads. They prefer to store the money at home. Usually only business farmers have cooperative accounts.	cannot afford it or prefer to keep the money at home because of the distance to any bank and the insecurity on the streets.
C.1	P8	18.	52 80	- The quality and quantity of the produce is decisive, since the quality determines if the product is accepted in the market and the quantity determines if off-takers are willing to come and buy the produce. Secondly the farmers are fragmented and located in areas far away from road access.	The quality and quantity of the produce is decisive, since the quality determines if the product is accepted in the market and the quantity determines if off-takers are willing to come and buy the produce. Secondly the farmers are fragmented and located in remote areas.
C.1	P8	19.	155 164	- Funds for extension services do not reach the farmers because those who manage the funds do not let the funds reach them.	
C.1	P8	20.	212 221	- The government is not playing a significant role in the market access of smallholders. A smallholder farmer cannot get much from a government agency.	
C.1	P8	21.	231 241	- The small farmers are at the mercy of the buyers. If farmers do not want to take their goods home again, they have to sell at the demanded price.	
C.1	P8	22.	323 340	- It happens that agricultural companies are not paying farmers according to the contract they agreed on. Thus, farmers lose trust in this business relationship.	
C.1	P8	23.	404 410	- Initiatives to support market access for smallholders in Nigeria do not work, since there is little or no consultation of farmers in this process.	
C.1	P9	24.	145 148	- There are legal fees that are required to sell at a market. These include fees for renting a stall, a shade or fees paid to market associations.	
C.1	P9	25.	246 251	- One of the problems in Nigeria is the inconsistency of policies. With the change of government policies are discontinued due to political reasons.	
C.1	P10	26.	40 49	- The credit provision by the government did not work, but after privatizing the system it was even worse because of the poor organisation.	
C.1	P10	27.	221 228	- High taxes and fees not only discourage farmers from selling formally, but some small entrepreneurs have to stop doing business because they are unable to afford	

				the fees.
C.1	P11	28.	72 86	- Farmers are hampered by the lack of market information. Mobile phone coverage has improved, but access to electricity remains a problem. Farmers also lack cooperation, collaboration as well as suitable infrastructure, as farm roads are mostly not motorable.
C.1	P11	29.	93 106	- The process of obtaining a license from the NAFDAC or from the SON, or an agreement sign from a court is very bureaucratic and thus a crucial hindrance.
C.1	P11	30.	289 310	- Obtaining a CofO involves a costly and highly bureaucratic process, which can take years. Having a certificate for a piece of land is essential as a collateral for loans. However, most farmers do not have land rights but rather operate on land by heritage.
C.1	P11	31.	312 328	- Market information is essential, since it can contribute to commercialize the sector and improve opportunities for farmers, like better prices for inputs among others. The youth should be engaged in agriculture as an enterprise to enhance productivity and production.
C.1	P12	32.	43 89	- Most farmers are still subsistence farmers. Few of them monetise their produce or grow cash crops to sell. However, the latter changes from year to year and from farmer to farmer. Climate change also affect the occurrence of natural disasters, pests and the variance in soil productivity. The latter is also affected by overcultivation, desertification and erosion. In good years production gluts occur especially in the staple food crops of the respective regions. There is not a high crop variety and advice, coordination as well as entrepreneurial knowledge is missing.
C.1	P12	33.	178 211	- The context around government programmes makes farmers think that they are being rewarded for their loyalty during the elections. Thus, the programme is seen as a grant and not a loan programme. For that reason, the loans are not repaid, with small farmers often unable to repay anyway due to their situation. Moreover, while such programmes can increase domestic production, they can lead to a production glut and thus not benefit farmers.

C.1	P12	34.	386 395	-	There are strong disincentives for farmers to enter the formal economy, grow cash crops or employ workers etc. There are various fees and licenses required.	Among others, various fees and licences act as strong disincentives for farmers to enter the formal economy, to grow cash crops or employ workers, etc.
C.1	P12	35.	595 603	-	The introduction of import bans has hardly benefitted smallholders due to smuggling and other measures to work around the bans.	
C.1	P12	36.	630 653	-	Due to the lack of social protection and working from year to year, it is essential for smallholders to monetise even small proportions of their harvest. Therefore, smallholders are focused on keeping their overhead costs low. Whether it is transport costs or labour costs, a small margin here and there makes a huge difference to them, their family and the community. In Nigeria, almost everyone is involved in agriculture in some form. So, it is a wide spectrum of people who are involved in smallholder agriculture.	Due to the lack of social protection and working from year to year, it is essential for smallholders to keep their overhead costs low and monetise even small proportions of their harvest. Even small margins in for instance transport, or labour cost makes a huge difference to them, their family and the community. In Nigeria, almost everyone is involved in agriculture in some form. So, it is a wide spectrum of people who are involved in smallholder agriculture.
C.2	P5	37.	106 125	-	Bribery can be used to be favoured for support services such as tractors in a particular local government area when the number of tractors is not sufficient to supply everyone.	<i>Construction/ Integration in: C.2, P5: 194 - 225</i>
C.2	P5	38.	194 225	-	Usually farmers can receive farm implements like tractors in the local government areas. However, there are not enough of these tractors, so that farmers who can offer bribes are advantaged. Local government workers favour these farmers, so that it is possible that the other farmers may receive the tractor months after the beginning of the harvest season. This lack of inputs reduces the acreage farmers can cultivate.	<i>Bribery in the distribution of fertiliser and tractors is very common - on a scale, six out of 10. The number of tractors available in the local government area is usually insufficient, so farmers who pay bribes are favoured. Other farmers may receive the tractor months after the beginning of the harvest season. Fertiliser is available from the agricultural development programme units - again,</i>

						<i>bribes are paid for preferential treatment. By affecting the equitable distribution of these inputs through bribes, the size of the acreage cultivated, the yield and thus the competitiveness is affected.</i>
C.2	P5	39.	237 242	-	Farmers may bribe government officials for the decision about the allocation of tractors or fertilizer. The agricultural development programme units are responsible for the allocation of fertilizer.	<i>Construction/ Integration in: C.2, P5: 194 - 225</i>
C.2	P5	40.	253 264	-	Bribery in fertilizer and tractor allocation is very common, a six on a scale from one to 10.	<i>Construction/ Integration in: C.2, P5: 194 – 225</i>
C.2	P6	41.	190 198	-	Bribery can be called consensual, but the truth is that it is not likely that farmers will be able to get their way without bribery. The capacity to produce is affected by having to bribe the police, the credit officers and even the ministry officials, such as agricultural officers.	Even though bribery is called consensual, it is indispensable or rather imperative for the farmers in order to get their way. The capacity to produce is affected by having to bribe the police, the credit officers and even the ministry officials, such as agricultural officers.
C.2	P8	42.	207 210	-	Bribery is increasingly legitimised by being seen as something that can oil the wheels of business.	
C.2	P9	43.	116 128	-	Farmers would at most bribe security officials. Otherwise, there are no reasons for bribery.	
C.2	P12	44.	386 410	-	Bribes hinder smallholder farmers in their daily lives. For instance, during the process of obtaining a license, in land use and landownership, during the transportation of goods and credit access. The latter may for instance involve an official, who offers a loan to a farmer in exchange for 50 percent of the loan value. Bribery is the most universal and palpable form of corruption, which every smallholder will experience over his/ her lifetime.	
C.3.1	P1	45.	99 105	-	When small farmers bring their produce to the market, they are stopped by police officers who want to collect money from them. The farmers are in a hurry to sell because the produce is raw and has a short shelf life.	<i>On the way to the market the farmer is extorted by the police. This phenomenon is like a norm. It is done in the open and</i>

				<p>If they do not give money to the police officers, they are detained on the road and the produce spoils. This reduces their final income.</p>	<p>are not paid the farmer may be detained and the produce spoils.</p>	<p><i>you may even get change. Since the produce is raw and perishable (E.g. cassava has to be peeled within a given time for certain purposes) the farmer is in a hurry to sell. If the police are not paid the farmer may be detained and the produce spoils. The intention to stop someone under a pretext (e.g. to check something) is the extortion itself. Thereby they already have a certain amount in mind.</i></p>
C.3.1	P1	46.	112 128	-	<p>For certain purposes you have to peel cassava in a certain time. If you are detained by the police you may lose the produce. The intention to stop someone under a pretext (e.g. to check something) is the extortion itself. Thereby they already have a certain amount in mind.</p>	<p><i>Construction/ Integration in C.3.1: P1, 99 - 105</i></p>
C.3.1	P1	47.	159 170	-	<p>Extortion through the police is like a norm. It is done in the open and you may even get change.</p>	<p><i>Construction/ Integration in C.3.1: P1, 99 - 105</i></p>
C.3.1	P2	48.	50 54	-	<p>Farmers are exploited on the road when trying to access rural centres.</p>	
C.3.1	P2	49.	298 351	-	<p>Because of insecurity there are numerous checkpoints on the road. There is one every three kilometres, set up by either the army, the police, the security and civil defence corps, road safety officials, highway patrol divisions and vehicle inspection officers. Companies usually pay the police in advance from the headquarters to be issued a clearance. If you do not have such a clearance you are extorted at every checkpoint. In addition, because of the insecurity there are local vigilantes, who finance themselves through extortion at checkpoints. On market days there can be checkpoints at an interval of less than a kilometre. P2 witnessed situations with checkpoints every 500 to 800 metres, like at the beginning and at the end of a bridge. If people refuse to cooperate, these checkpoints can</p>	

				impede traffic and cause ghost roads or long traffic jams, since the personnel will search for reasons to make the drivers pay. People may even be shot if they do not pay.	
C.3.1	P3	50.	90 95	- Farmers are often extorted by the police, when they transport their produce to the local market. Because of this, farmers often spend more money for the process than they gain.	<i>Farmers are often extorted by the police, when they transport their produce to the local market. Because of this, farmers often spend more money for the process than they gain.</i>
C.3.1	P3	51.	122 125	- When smallholders transport goods to the market, there are officers, who request money.	<i>Construction/ Integration in C.3.1: P3, 90-95</i>
C.3.1	P3	52.	193 207	- Extortion happens during transportation. The farmers may have goods stored on the roof so that the police fine the farmer. However, firstly the road safety corps is responsible for such offenses and secondly the amount of the fine is random and no receipt is issued. Particularly the latter convinced P3, that this money ends up in private pockets.	
C.3.1	P3	53.	211 218	- In the event of a traffic rule violation, it is possible that the case will be decided in a road safety corps mobile court, while the vehicle is confiscated. However, it may occur that the case is not adjudicated. However, the farmer is still expected to pay a certain amount to get his vehicle and/or goods back.	
C.3.1	P4	54.	295 307	- The police or the army mount illegal checkpoints on the road where they collect bribes ranging from five to 10 dollars for no particular service. In case you refuse to pay they might arrest you. The extortion happens openly on the road it is "like a way of life".	
C.3.1	P4	55.	317 335	- Extortion at checkpoints is very frequent. For instance, on the roads from Lagos to Asaba there are more than 115 police and 36 army checkpoints on a distance of about 300km. As a motorist you pay 100 to 500 Naira at each checkpoint. The extortion is done openly and you can even get change for your payment.	
C.3.1	P4	56.	396 413	- Extortion at checkpoints on the street has become institutionalised in Nigeria. If you try to ask why they are extorting you, they give different reasons, e.g. they do	Extortion at road checkpoints has become institutionalised in Nigeria. When attempts are made to inquire

				not receive enough money for bullets, fuel or repair of uniforms, etc.	why the extortion is taking place, the extortionists give various reasons, e.g. that they do not receive enough money for bullets, fuel or repair of uniforms, etc.	
C.3.1	P4	57.	729 736	- If you pay 2000 Naira to police or road safety officials on the road, you can try to bargain at the next two or three checkpoints to lower the sum there.	If for instance, 2000 Naira is paid to the police or road safety officers at one checkpoint, an attempt can be made to bargain at the next two or three checkpoints to reduce the amount there.	
C.3.1	P5	58.	129 163	- Usually middlemen are transporting the goods from the farms to the markets. They come to buy in bulk and sell at the market. They are aware of the significance of time and so they will pay the bribes required by law enforcement agencies on the road. They will impute these costs when buying from the farmers. Thus, the farmer receives less money from the middlemen, who additionally make by far the most gain from the transaction.	Usually middlemen transport the produce from the farms to the markets. They come to buy in large quantities and sell at the market. They are aware of the value of time and therefore pay the bribes demanded by the enforcement authorities on the road. They will impute these costs when they buy from the farmers. This way, the farmer receives less money from the middlemen, who also make by far the most profit from the transaction.	<i>Usually, extortion involves the middlemen who usually handle the transport of goods, buying in large quantities from farmers to transport the produce to market and sell it. This type of corruption is very common, to the extent that it is considered normal. When buying the goods, the middleman will already factor in the cost of the extortion. This way, the farmer receives less money from the middlemen, who also make by far the most profit from the transaction.</i>
C.3.1	P5	59.	268 289	- Normally extortion happens to the middlemen, since they usually take on the task of transporting and selling the produce. Such extortion is very common to such an extent, that people who are extorted see it as normal. The costs will be calculated before departure and deducted from the amount paid to the farmer.		<i>Construction/ Integration in C.3.1: P5, 129 - 163</i>
C.3.1	P6	60.	150 159	- The most common case of extortion is perpetrated by the police and other law enforcement agencies on the road. On a distance of 50km from the farm to the market there can be up to five checkpoints where the farmers are extorted. The End SARS protests have reduced the occurrence of such extortion. It is not clear how sustainable this development is.		

C.3.1	P6	61.	237 246	-	Extortion is common. Farmers are extorted on the way to the market. If they don't pay they are delayed and since their produce is perishable they may incur losses. The sum accumulates so that farmers have to pass on the losses to consumers.
C.3.1	P7	62.	92 102	-	The smallholders are extorted on their way to the market. If they do not pay, they are delayed for up to a few days. Since the produce is perishable, the farmers are forced to pay. Because of the frequency of such checkpoints, the farmers may not even make a profit and the consumer price will be very high.
C.3.1	P7	63.	290 318	-	When farmers move produce from Benue state to Lagos, they may be confronted with more than 100 police checkpoints. They have to pay on each checkpoint. If they do not pay, they will be delayed. To delay, the police will look for a mistake or set it themselves. When farmers are taken to the police station, they do not face fair treatment because the police protect their colleagues. The minimum amount for extorting a trailer load is 500 Naira. The delays are problematic since produce (e.g. orange) is highly perishable. Through such cases the cost will rise considerably and the farmers usually do not have the opportunity to add value to the produce to reduce losses.
C.3.1	P8	64.	249 315	-	Extortion is perpetrated by various security agencies at checkpoints as well as by revenue agencies at produce control checkpoints. In both cases the smallholders often pay 15 or more percent of the value of the goods they want to sell that day. The agencies set the price themselves. If the farmers do not pay, they are delayed, which they cannot afford due to the perishable nature of their goods. This phenomenon is very common in the western states of Nigeria – not so much in the north. P8 experienced this himself. It affects both private and business vehicles. Regardless of previous transactions, payment must be made at each checkpoint. The smallholders lose 20 to 30 percent of their final profit. Because of this extortion combined with poor infrastructure they tend to sell to their local

				communities irrespective of the price.	
C.3.1	P9	65.	136 144	- Extortion at road checkpoints is perpetrated by police, road safety or people collecting produce tax.	<i>Extortion at road checkpoints is perpetrated by thugs, the police, road safety or people collecting produce tax. The farmers cannot afford to be delayed since their produce is perishable. So, they are forced to pay. Construction/ Integration in C.3.1: P9, 136 - 144</i>
C.3.1	P9	66.	148 162	- The farmers may be extorted by thugs or the police. The farmers cannot afford to be delayed since their produce is perishable. So, they are forced to pay.	
C.3.1	P10	67.	122 135	- Extortion on the street, e.g. by the police, is very common. It increases the cost of transporting the produce to markets and thus the final product price. These costs depend on the type and quantity of goods transported.	
C.3.1	P11	68.	134 177	- Middlemen who sell inputs, buy products or provide farmers with information are confronted with extortion on the street. They are asked for certain documents or simply money. The checkpoints are manned by various officials such as police, customs or vehicle inspection officer. There can be up to 20 checkpoints on a distance of 30km. The costs are passed on to the smallholders through the middlemen's pricing.	
C.3.1	P12	69.	225 246	- The free movement of goods at the borders of Nigeria is impaired. Extortion tactics by customs and security officials constrain the trade of farmers across borders. Within Nigeria, there can be 12 checkpoints on a distance of 30 miles manned by different security agencies. A small bribe must be paid at every checkpoint. So even small trips to certain markets can be economically unviable for smallholders.	
C.3.2	P1	70.	106 108	- Inspectors, especially livestock inspectors extort money from farmers selling at the market. This is a daily phenomenon for the farmers.	<i>Inspectors, especially livestock inspectors may extort money from farmers selling at the market. This is a daily phenomenon for the farmers and even a norm. Either the inspectors collect questionable livestock</i>

taxes or they extort money from the farmer during livestock inspection. If the farmers do not pay the latter, the livestock is declared unfit to be sold. This means it cannot be sold or it is confiscated.

Construction/ Integration in C.3.2: P1, 106 - 108

C.3.2 P1 71. 129 - The livestock inspectors will collect livestock tax. The correctness of this is questionable. Inspectors may extort money from the farmer during livestock inspection. If the farmer does not pay, the livestock is declared unfit to be sold. This means it cannot be sold or it is confiscated.
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C.3.2 P1 72. 161 - The extortion through inspectors is like a norm.
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Construction/ Integration in C.3.2: P1, 106 - 108

C.3.2 P2 73. 79 - There are still traditional governance structures that play a role in Nigeria. The interviewee explains the situation in the north east. Besides taxation by the local, state or federal government, there are traditional authorities like chiefs, who collect “informal” taxes from farmers. The accumulated cost of multiple taxation by these different actors discourages farmers from selling on the market. However, some of the traditional institutions are “sympathetic”, where taxes are collected infrequently and some are “stringent”, where taxes are collected frequently. There are communities with and without market days. Particularly on market days all sorts of officials come to collect tax from farmers. The smaller communities without market days usually lack the resources to collect tax from them. The traditional institutions remit taxes to “their own line of governance”. Constitutionally they are only given honourable roles. However, everybody knows that they have to pay this “haraji” [Hausa for “taxing”] and it is commonly accepted and used to preserve these traditional institutions.
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The accumulated cost of multiple taxation discourages farmers from selling on the market. Taxation occurs by federal, state or local tax collectors, but also informally by traditional institutions or authorities that are still in existence. The traditional institutions remit taxes to “their own line of governance”. Constitutionally they are only given honourable roles. However, everybody knows that they have to pay this “haraji” [Hausa for “taxing”] and it is commonly accepted and used to preserve these traditional institutions. However, for instance, in the north east some of the traditional institutions are “sympathetic”, where taxes are collected infrequently and some are “stringent”, where taxes are collected frequently. It also depends on the size of the communities, where small communities without market days are usually not taxed since they usually lack the resources to collect

					tax from them. On the other hand, on market days of larger communities all sorts of officials emerge to collect taxes.
C.3.2	P3	74. 125 174	-	There are people who collect taxes in markets on behalf of the local government. It seems that these taxes are legal, but these markets are in a desolate state and the collectors use methods of intimidation. There are few stalls or shades and those that are present are usually not properly maintained. There is a lack of sanitary facilities in the market place, so you can see people “defecating around these markets”. It seems that the collected taxes are not invested. So P3 seems unsure if the taxes are being remitted back to the government. She also mentions that sometimes the collectors charge a little extra for themselves, for example when they seize property.	On markets, seemingly legal taxes are collected on behalf of the local government. However, these taxes do not seem to be invested, as there are few, or not properly maintained shades, stalls and a lack of sanitation facilities. The lack of investment and the intimidation methods in tax collection makes P3 unsure whether taxes are legal and/or paid to the government. Furthermore, sometimes collectors charge a little extra for themselves, for example when seizing property (P3, 74)
C.3.2	P10	75. 112 118	-	There are many people in the market who extort sellers. This is not only true for shop owners, but also for the farmers who sell on the ground.	
C.3.3	P2	76. 204 207	-	If you do not have connections with an influential official, you have to give him something to receive fertilizer allocation.	
C.3.3	P3	77. 95 121	-	Extension officers sometimes expect a favour in return for their services. This may be fuel money, transportation cost or other forms of payments to “make it comfortable for them to come”. It also depends on the location. P3 gives the example of Umukadia, a hilly area that is difficult to reach. Due to lack of cost coverage and salary, the extension officers pass on the costs to the farmers. P3 explains that this way the farmers can make sure that the extension officers actually come.	
C.3.3	P4	78. 59 119	-	Farmers from the informal sector resort to informal sources of credit, such as family, because officials tend to charge high fees when farmers try to obtain funds or credit from them. When trying to access microfinance credits, smallholder farmers have to register formally. This process involves high monetary cost	Farmers resort to informal sources of credit, because accessing microfinance involves high formalisation cost and high fees charged by officials. As a condition for credit access, bureaucrats demand secrecy of the

				and thus hinders them from accessing credits. Extortion is involved, as the bureaucrats demand that the farmers keep the monetary exchange secret, otherwise they will not receive the credit. This monetary exchange does not occur online but happens in a direct exchange in the offices. In fact, the registration itself seems to be fraud, since P4 suggests that nobody actually receives these credits, which are provided with the involvement of the government.	(extorted) transaction. The latter happens in direct exchange in the offices rather than online. In fact, the registration itself seems to be fraud, since P4 suggests that nobody actually receives these government supported credits.
C.3.3	P4	79.	153 199	- When officials have distributed available credits to their favourites, they continue to advertise that the funds are still available. Unsuspecting smallholders are asked to pay a "fee" (a bribe) when applying for the non-existent loans. Sometimes the bureaucrats use intermediaries to approach the smallholders to prevent the law enforcement agencies from tracing the crime back to them. They are usually family or friends who have no connection with the institution responsible for disbursing the credits. The fees might be legal, for instance if there are credits available. However, usually the amount paid is considerably higher than the receipted legal fee. P4 gives the example of 100 dollars for registration, whereby 97 dollars is extortion and only three dollars official fee.	
C.3.3	P4	80.	285 295	- The provision of bureaucratic services in Nigeria depends on how much a person is able to pay. Such extortion is not even hidden by the bureaucrats. P4 gives the example of a receipted three-dollar fee for a loan, with an additional 97 dollars extorted.	
C.3.3	P4	81.	307 314	- When there is a promising opportunity, some smallholders borrow money to settle extortion payments and thus receive this particular service. However, it is still possible that they do not receive this service.	
C.3.3	P4	82.	432 442	- Extortion hinders access to justice. By the time you paid the required bribes to the police and the responsible officials in the court system, the process may have failed, you may be in debt, or you may have been forgotten. Generally, bureaucratic provision of services that should support smallholder farmers has	Extortion hinders access to justice. By the time the demanded bribes are paid to the police and relevant officials in the court system, the process may have already failed, the victim of extortion may be in debt, or forgotten.

				been taken over by corrupt practices.	Generally, bureaucratic provision of services that should support small-holder farmers has been taken over by corrupt practices.	
C.3.3	P4	83.	495 - 499	Smallholders are confronted with multiple taxation by the federal government, state government, local government and indigenous governance structures.		
C.3.3	P4	84.	668 - 690	P4 bought a piece of land for him and his family. The registration costs ranged from 500 to 700 dollars. The actual fee however is 200 to 300 dollars. The difference goes into private pockets of town planning officers. This practice is not questioned however.		<i>P4 experienced land registration cost from 500 to 700 dollars. The actual fee however was 200 to 300 dollars. The difference goes into private pockets of town planning officers. This practice is not questioned however.</i>
C.3.3	P4	85.	723 - 729	If you are building a house, you are charged by the environmental management agency. For instance, they charge you 250 dollars for digging in the ground. The payment is questionable since you do not receive a receipt for it.	During house construction, fees are charged by the Environmental Management Authority. For example, the cost of digging the ground is 250 dollars. The fee is questionable as no receipt is issued.	
C.3.3	P4	86.	736 - 739	When you pay 500 to 700 dollars for land registration, you will be receipted for only 250 to 300. The rest goes into the pockets of the town planning officer.	If the cost of land registration is 500 to 700 dollars, only 250 to 300 euros are receipted. The difference goes into the private pockets of the town planning officer.	<i>Construction/ Integration in C.3.3: P4, 668 - 690</i>
C.3.3	P4	87.	781 - 859	Extortion by officials happens in every office in Nigeria. P4 provides and examples, whereby a person is told to pay 100 dollars in an office for a particular service. However, the amount receipted is 20 dollars. If the person asks for the remaining 80 dollars, the official asks if the person does not want to have the service done. The same kind of corruptly inflated fees are observable in the case of driver licenses and tuition fees. Another example is when a motorbike taxi driver wants something from a local chairman, he/ she has to pay something to see the official. If the driver does not pay, his/her matter is delayed or postponed. Most of the money a civil servant has available comes from such	Extortion by officials happens in every office. For instance, a person is told to pay 100 dollars for a service (like a driver license, or tuition fees), but only 20 is receipted. When the person inquires, the officer will ask if the person does not want to have the service done. When a motorbike driver wants something from a chairman he/she has to pay something. Otherwise his/her matter is delayed or postponed. Most of the money a civil servant has available comes from such	

C.3.3	P6	88.	122 - 123	-	income, not from official salary. Credit officers extort smallholders who want to access a credit.	income, not from official salary. Credit officers extort smallholders who want to access a credit.	<i>There are situations whereby credit officers extort smallholders who want to access a credit or a loan.</i>
C.3.3	P6	89.	159 - 161	-	There are situations whereby farmers have to pay bribes to credit officers in order to receive a loan.		<i>Construction/ Integration in C.3.3: P6, 122 - 123</i>
C.3.3	P6	90.	212 - 233	-	When agricultural officials like extension officers visit farmers, these should collect money for the officials in the locality, otherwise they might go to other people who are willing to pay the money. These services of the state should normally be free of charge for farmers. It is very common and can even be called a standard procedure.	The services of agricultural officials such as extension officers are usually free of charge. However, it is common, or can even be described as standard procedure, that farmers have to collect money for the officials in the locality, otherwise they might go to other people willing to pay.	
C.3.3	P7	91.	319 - 347	-	If a farmer has not the best relationship with a traditional ruler, who may function as a guarantor, the ruler may refuse to cooperate. Sometimes the ruler also demands a share for his function as guarantor. Due to the Single Treasury Account various opportunities for private enrichment are blocked. Hence the officials now use other methods for such enrichment. They say, for example, that there is no A4 paper to print and thus signal that they expect something in return. They can also ask directly what their share is. In case of an objection, they say "come and sign the documents by yourself".		<i>For credit access, farmers usually need to provide a collateral. If farmers do not have a collateral or a relative, who may function as guarantor, they may turn to their local chiefs. If they do not have a good relationship with this chief, he may refuse to function as a guarantor, or demand something for this service (e.g. a share of the credit). Due to the Single Treasury Account various opportunities for private enrichment are blocked. Hence the officials now use other methods for such enrichment. They say, for example, that there is no A4 paper to print and thus signal that they expect something in return. They can also ask directly what their share is. In case of an objection, they say "come and sign the documents by yourself".</i>

C.3.3	P7	92.	366 375	-	If farmers want to obtain for instance a microcredit they usually need to provide a collateral. If farmers do not have a collateral or a relative, who may function as guarantor, they may turn to their local chiefs. If they do not have a good relationship with this chief, he may refuse to function as a guarantor, or demand something for this service.	<i>Construction/ Integration in C.3.3: P7, 319 - 347</i>
C.3.3	P11	93.	93 130	-	In the process of obtaining a license from the NAFDAC or from the SON, or an agreement sign from a court, the farmers might have to pay money to the officials involved to get approval. This particularly hinders the formalisation process.	In the process of obtaining a license from the NAFDAC, SON, or an agreement sign or a DLC from a court, the farmers might have to pay money to the officials involved to get approval. This hinders the formalisation process. The court case is less common, but particularly delicate since the court is seen as "temple of justice".
C.3.3	P11	94.	182 197	-	Extortion in a court may occur in the process of obtaining an agreement sign or DLC. This does not happen so often, but is particularly delicate since the court is seen as "temple of justice".	<i>Construction/ Integration in C.3.3: P11, 93 - 130</i>
C.3.3	P11	95.	289 310	-	Obtaining a CofO involves a costly and highly bureaucratic process, which can take years. Having a certificate for a piece of land is essential as a collateral for loans. There is an "official amount" you pay and you have to "pay the people working in those ministries"	
C.3.3	P12	96.	142 146	-	Officials of the state or local government may come to levy ad-hoc taxes on farmers. Officials claim that farmers do not have the right to farm a certain piece of land and demand money to look the other way.	
C.3.3	P12	97.	254 266	-	With the change of land distribution, the allocation of land by local and state officials to their political allies often forces smallholder to pay bribes and kickbacks to avoid having their land taken from them. This is a very common occurrence and the reason why many farmers use derelict, unused land for farming even in larger cities.	
C.3.3	P12	98.	420	-	Besides the role of extortion in land tenure, it also	In the farmer-herder conflict, local

478 affects the farmer-herder conflict. Local traditional chiefs, supported by local militias or armed thugs, extort pastoralists in exchange for permission for their grazing activities to go unmolested in their area. Extortion mainly evolves around security officials like police and military but also unofficial armed militias. This is particularly significant in contested areas. Communal conflicts over farmland, often involving sustained cycles of violence, usually stem from issues of land ownership, land use, clan identities, villagers' identities, ethnicity and even sub-ethnic divisions. Security actors exploit such divisions to extort money based on the threat that they will take sides if payment is not made. Extortion often plays a role as an alternative livelihood to compensate for the loss of embezzled funds meant to pay officials.

traditional chiefs, supported by local militias or armed thugs, extort herders in exchange for permission to engage in their grazing activities in their territory unmolested. This is particularly significant in contested areas. Communal conflicts over farmland, often involving sustained cycles of violence, usually stem from issues of land ownership, land use, clan identities, villagers' identities, ethnicity and even sub-ethnic divisions. Beside extortion through unofficial armed militias this practice mainly evolves around security officials like police and military, who exploit such divisions to extort money based on the threat that they will take sides if payment is not made. It often represents an alternative livelihood to compensate for the loss of embezzled funds meant to pay officials.

C.4	P1	99.	208 - 214	-	The impact of auto-corruption on market access is the reduction of monetary resources that could potentially go to smallholder farmers.	<i>The impact of auto-corruption on market access is the reduction of monetary resources that could potentially go to smallholder farmers. This is a common occurrence.</i>
C.4	P1	100.	227 - 230	-	The reduction of monetary resources that could potentially go to smallholder farmers through auto-corruption is common.	<i>Construction/ Integration in C.4: P1, 208 - 214</i>
C.4	P2	101.	407 - 459	-	As funds for infrastructure are misappropriated, farmers cannot access markets by choice. Especially in rural areas, they are at the mercy of the buyers that come. These middlemen buy the produce at knock-down prices and sell inputs at high prices. Moreover, farmers cannot sell at the best time, but only when the quantity is agreeable to the transporter.	
C.4	P3	102.	153	-	The funds collected for the market is expected to be	<i>Construction/ Integration in C.4:</i>

			156		remitted back to the government to maintain the market. However, it can be observed that nothing is done on the market.				<i>P3, 225 - 257</i>
C.4	P3	103.	225 257	-	Taxes that are collected for the provision of basic amenities on market places are not used for the latter. It is embezzled, since it is not used for its intended purpose. It is not clear whether this money actually reaches the local government or whether it ends up in private pockets. This scheme, or problem is a recurring situation even with changing governments.				<i>Taxes collected for the provision of basic amenities in market places seem to be embezzled and not used for their intended purpose. It is not clear if this money reaches the local government or if it ends up in private pockets. This scheme is recurring even with changing governments.</i>
C.4	P6	104.	263 274	-	There are cases of ghost workers. Their salaries are paid but nobody will fulfil the needed functions. Thus, the desired effect of the funds does only happen on paper. Cases of embezzlement are common, where funds which are supposed to target rural development are not made available since they have been embezzled. Property misappropriation happens too, where allocations for farmers are allocated to politicians and influential people.	Ghost workers are paid salaries, but their functions and thus desired outcomes are only performed on paper. Embezzlement is common, and one reason when funds for rural development are not made available. Property misappropriation occurs, for instance, when allocations for farmers are given to politicians and influential people.			
C.4	P12	105.	462 471	-	Security sector corruption is an endemic phenomenon in Nigeria. When funds are embezzled at the strategic level it increases the incentives for embezzlement on the operational level. Additionally, it incentivises operational level actors to create threats which require new funds. Such threats, that provide options for embezzlement in turn creates opportunities for extortion on the tactic level.	Security sector corruption is an endemic phenomenon. Embezzlement at the strategic level increases the incentives for it at the operational level. The latter is also incentivised to generate threats that require new resources that create new opportunities for embezzlement, again producing avenues for extortion at the tactical level.			
C.5	P1	106.	74 79	-	There are situations in which substandard, non-durable equipment is purchased from suppliers. In some cases, this equipment does not even meet the needs of smallholder farmers.				<i>Construction/ Integration in C.5: P1, 234 - 256</i>
C.5	P1	107.	234 256	-	Contracts for infrastructure projects, for instance roads to connect farms with markets, are often inflated, or				<i>Contracts for infrastructure projects, for instance roads to</i>

				completed with substandard quality, so that the infrastructure is already dilapidated before project finalisation. Furthermore, a common occurrence is that substandard farm equipment and tools are purchased, which the farmers sometimes do not even use. Substandard equipment is bought at a lower price than higher quality equipment, so that the difference can be diverted.		<i>connect farms with markets, are often inflated, or completed with substandard quality, so that the infrastructure is already dilapidated before project finalisation. Furthermore, a common occurrence is that substandard, non-durable farm equipment and tools are purchased from suppliers, which the farmers sometimes do not even use or need. Substandard equipment is bought at a lower price than higher quality equipment, so that the difference can be diverted.</i>
C.5	P2	108.	168 172	-	Contract fraud happens when contracts for the supply of fertilizer are assigned as a means to secure political patronage. In the north east, this strategy is the most effective way to secure political patronage.	
C.5	P2	109.	487 532	-	P2 was involved in a training of farmers. Without the trainers' knowledge, a contract was organised for the distribution of seeds and inputs to farmers. The latter was done regardless of the training and some of the registered the training and distribution were not even farmers. The allocation of contracts can be seen as a "lottery ticket" that comes without responsibility and contract fraud as an accepted norm. If all the "concerned" people got their share, nobody cares. They can, for example, distribute substandard quality fertiliser, all that matters is that they have done something. P2 met a veterinarian who was supposed to assess the livestock to be distributed and prepare a cost plan for vaccination. The veterinarian used market prices for the latter, but refused to agree when the supervisor wanted to increase the figures by 300 per cent. As a result, the veterinarian was fired.	
C.5	P2	110.	540 617	-	Finding that market-level subsidies were not reaching farmers, the previous government introduced the e-	Finding that market-level subsidies were not reaching farmers, the

voucher system under the Growth Enhancement Support Scheme. This system had its own problems, such as distributors would capitalise on regions with marginal network connectivity and the fact that the process was not biometric. Also, many farmers in rural areas were illiterate and the scheme thus favoured better educated farmers. However, it was at least targeted directly at farmers and certain commodities. In addition, contracts for distribution were given to private companies and in general the process was comparatively more efficient and less bureaucratic. The current government has abolished this system, probably because the e-voucher system excluded state and local governments. Now, without the e-voucher system, inflated fertiliser contracts can be issued and no one can verify whether the fertiliser reaches the farmers or not.

previous government introduced the e-voucher system under the Growth Enhancement Support Scheme. The system was not biometric, discriminated against illiterate farmers and allowed distributors to capitalise on regions with marginal network connectivity. However, it was comparatively more efficient, since contracts were awarded to private companies, the process was less bureaucratic and it targeted farmers and certain commodities directly. The current government has abolished this system, probably because it excluded state and local governments. Now, inflated fertiliser contracts can be issued and no one can verify whether the fertiliser reaches the farmers or not.

C.5	P3	111.	260 268	-	Contract fraud may not be directly linked to smallholders.	
C.5	P4	112.	448 456	-	Contract fraud is affecting for instance infrastructure projects, since they are not executed if the contract is fraudulently awarded or allocated. Since the construction of roads should give smallholders access to for instance cities, it is a major impediment for them.	
C.5	P5	113.	353 364	-	Contract fraud usually happens in every sector including agriculture. The effect is that the outcome of the contract is usually adversely affected.	
C.5	P7	114.	544 576	-	When contractors are receiving a contract for an infrastructural project like a road or bridge needed by farmers to bring produce to the market, they have to settle different actors. In the bidding process, the officials involved demand a share of the funds to be awarded. When the contractors want to start the project, they will first have to pay a share to the local villagers. The amount left does not suffice to complete the project and it will be abandoned	<i>Construction/ Integration in C.5: P7, 582 - 642</i>
C.5	P7	115.	582	-	After the contractor abandons a road the condition of	<i>After receiving a contract,</i>

642 that road is worse than before the project started. Where there was solid compressed earth before, there is only mud after the start of construction. Market stores and boreholes are other examples of such abandoned projects. Projects are abandoned due to insufficient funds. In the bidding process of projects, it is not the qualified person that wins, but the one paying the most to the responsible officials. In addition to such costs of bribery, the prices for the goods needed to complete the project vary significantly. In the case of contracts by the NDDC (Niger Delta Development Commission), it was also observed that contract companies were owned by politicians. Such political elites are using contractors to gain a contract and divert the money involved. They use contractors as figure heads and protect themselves.

contractors have to settle different actors. In the bidding process, the officials involved demand a share of the funds to be awarded. It is not the qualified person that wins, but the one paying the most to the responsible officials. Additionally, when the contractors want to start the project, they will first have to pay a share to the local villagers. The fluctuation of prices for building materials further increases costs. The amount left does not suffice to complete the project and it will be abandoned. Examples are market stores, boreholes, and infrastructural projects like bridges or roads. In the latter case, the condition of that road is worse than before the project started. Where there was solid compressed earth before, there is only mud after the start of construction. In the case of contracts by the NDDC (Niger Delta Development Commission), it was also observed that contract companies were owned by politicians. Such political elites are using contractors to gain a contract and divert the money involved. They use contractors as figure heads and protect themselves.

C.5 P8 116. 101 - Contracts are inflated. For instance, in the Anchor Borrowers Programme in 2018, officials tried to supply farmers with unnecessary amounts of hand ploughs.
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C.5	P8	117. 190 203	-	The costs were to be borne by the farmers in a proportion unspecified by P8, which is why they resisted. In July or August 2020, the National Agricultural Seed Council sealed a warehouse in the FCT, because it contained substandard seeds. These seeds were deliberately purchased and distributed by a governmental agency.	
C.5	P8	118. 355 359	-	A common form is the purchase and supply of fake or substandard seed through government agencies. Farmers still receive the inputs at a cheap rate, but its benefits are questionable due to its poor quality.	
C.5	P8	119. 397 404	-	The officials involved in support programmes for smallholders tend to purchase equipment, not based on the needs of farmers, but based on the possibilities for private enrichment.	
C.5	P8	120. 412 422	-	Officials can benefit from the procurement of expensive materials. Small equipment for farmers does not offer much room for inflation, where higher priced items are better suited for that purpose.	Officials benefit from the procurement of expensive, higher priced, materials, which offer more room for inflation than small equipment.
C.5	P9	121. 178 195	-	Contract fraud affects infrastructure and the building of facilities like abattoirs, markets, roads and the reparation of stalls.	
C.5	P10	122. 137 148	-	If a contract is abandoned because the contractor and the contract giver share the money instead of investing it, this affects, for instance, the construction and completion of projects such as infrastructure, markets, or training for farmers.	
C.5	P12	123. 514 545	-	Contract fraud affects for instance ecological contracts, infrastructure contracts, anti-erosion and desertification as well as irrigation measures, agricultural industries, electrification contracts and flood diversion. Such contracts are either not implemented, or more often completed to a substandard degree. The aforementioned contracts are essential to enable smallholders to access markets. The issues targeted by the aforementioned contracts are everywhere in Nigeria.	
C.6	P1	124. 182 196	-	There are situations in which officials connive with farmers they know to divert and sell subsidised inputs like fertilizer and seeds. The process is not	

				transparent.	
C.6	P1	125. 257 266	-	Subsidy programmes are abused by artificially inflating the number of beneficiaries and diverting funds. The diverted funding is lost to the amount of the artificially added participants.	Funds are lost as government programmes are abused by artificially inflating the number of beneficiaries and diverting funds.
C.6	P2	126. 152 179	-	Through the growth enhancement support scheme farmers could access fertilizer and seeds. The farmers were supposed to pay between 25 and 50 percent of the total cost. Accessing those subsidized inputs was constraint by the rurality and accessibility of the location. The responsible officials capitalised on that shortfall and sold the commodities to middlemen. The latter may happen to secure political patronage. Farmers are heavily constraint by these processes since the necessary inputs do not reach them and they can thus not increase their yields.	The growth enhancement support scheme provided farmers with 50 % to 75 % subsidised fertiliser and seeds. However, the rurality and thus accessibility hindered farmers' access. The responsible officials capitalised on this shortfall and sold the commodities to middlemen, possibly to secure political patronage. Thus, since the inputs did not reach them, the farmers could not increase their yields.
C.6	P2	127. 182 255	-	After 2016, the situation has worsened with the new government, as subsidized agricultural inputs are now only available directly from the Minister of Agriculture through the Agricultural Development Programme. Due to the bureaucratic burden and rationing, mostly to one 50 kg bag of NPK fertiliser, some farmers decide to buy from the market, even though with allocation, a bag could be 5000 Naira instead of 8500 Naira. Since the process of selling fertiliser is not beneficial to the officials, they make the process particularly cumbersome so that the farmers do not come. They can then sell the fertiliser to market traders for 5000 Naira plus 1000 or 2000 Naira and remit 5000 to the government.	Since 2016, with the new government the situation worsened, as subsidized inputs are now only accessible via the Agricultural Development Programme. Due to red tape and rationing, usually a 50kg bag of NPK fertiliser, some farmers even buy from the market for 8500 instead of 5000 (with allocation). The process of selling fertiliser is not beneficial to the officials, so they make the process particularly cumbersome to keep farmers from coming. They can then sell the fertiliser to market traders for 5000 Naira plus 1000 or 2000 Naira and remit 5000 to the government.
C.6	P2	128. 268 290	-	P2 witnessed a case where a truckload, 500 or 1000 bags of NPK fertiliser were handed over to government officials who were being prepared at a training centre for the time after their involvement in politics. It would be their responsibility to distribute this fertiliser, regardless of the person. However, they are persons	There are training centres where government officials are prepared for their time after politics. P2 witnessed a truckload, 500 or 1000 bags of NPK fertiliser being handed over to the officials to distribute irrespective of the

				with political interests and so the fertiliser was diverted. There was a year when even half of the allocation of one state was diverted to another state.	person. However, these persons had political interests and so the fertiliser was diverted. One year, even half of the allocation from one state was diverted to another state.	
C.6	P2	129.	494 500	- P2 witnessed a case where farm inputs were distributed to beneficiaries regardless of the previous training. Some of the beneficiaries were not even farmers.	P2 witnessed a case where farm inputs were distributed to beneficiaries, some of whom were not even farmers, regardless of prior training.	
C.6	P4	130.	116 125	- Credits do not reach farmers since bureaucrats will give them to family, friends and even members of the elite, who do not need them.		
C.6	P4	131.	523 546	- Consumption subsidies like for fuel are ineffective, since the subsidized fuel is exported by elites to neighbouring countries and thus it does not support smallholders in Nigeria to the extent it should.		<i>Construction/ Integration in C.6: P4, 555 - 583</i>
C.6	P4	132.	555 583	- Subsidies like for fuel do not support the people, but rather enrich the elites who are responsible for the import/ export process. Moreover, the subsidy system is not transparent. In 2012, the people protested against the subsidy regime. As a result, the strategy was changed from subsidising consumption to subsidising production. However, these subsidies never reached the farmers, but at least partially benefited politicians.	Subsidies like for fuel do not support the people, but rather enrich the elites who are responsible for the import/ export process. Moreover, the subsidy system is not transparent. Protests in 2012 led to a change to production subsidies, which, however, never reached the farmers, but at least partially benefited politicians.	<i>Consumption subsidies do not support the people, but rather enrich the elites who engage in trading for instance fuel with neighbouring countries. Moreover, the subsidy system is not transparent. Protests in 2012 led to a change to production subsidies, which, however, never reached the farmers, but at least partially benefited politicians.</i>
C.6	P5	133.	164 185	- Farmers who are registered with the agricultural development programme are entitled to subsidised fertilizer. Since the fertilizer is usually not sufficient for all registered farmers, persons in charge of the allocation process favour their cronies. Thus, few people receive almost all fertilizer. Some of them are not even engaged in farming and thus resell the fertilizer at a higher rate to the farmers who did not receive fertilizer in the first place.		<i>Farmers who are registered with the agricultural development programme are entitled to subsidised fertilizer. Since the fertilizer is usually not sufficient for all registered farmers, persons in charge of the allocation process favour their cronies. Thus, few people receive almost all fertilizer. Some of them are not even engaged in</i>

				other sectors, non-farm activities or to private farms of responsible officers.	<i>officials. The money is diverted either in other sectors, non-farm activities or to private farms of responsible officers.</i>
C.6	P6	137. 161 164	-	Certain benefits that are supposed to go to farmers are embezzled for non-farm use.	<i>Construction/ Integration in C.6: P6, 123 - 133</i>
C.6	P7	138. 116 129	-	The price of subsidized fertilizer is often inflated. P7 gives the example of 5000 Naira for a 50 percent subsidized bag of fertilizer, where 1000 is added to the final price for farmers.	<i>Construction/ Integration in C.6: P6, 645 - 689</i>
C.6	P7	139. 169 209	-	Agricultural credits that are meant for farmers are given out to businessmen. Comparing to the Covid-19 palliatives, P7 assumed the possibility that fertilizer is stored in warehouses until the time is convenient to use it for instance in political campaigns.	
C.6	P7	140. 349 353	-	Fertilizer that is distributed to the local government is diverted. The chairman will share this fertilizer among his family members, or sell it to agro-dealers.	
C.6	P7	141. 645 689	-	Fertiliser is usually imported in Nigeria and is therefore expensive, which is why the government subsidises it. P7 witnessed bags for 5000 Naira being sold for 6000 to 8000 Naira by the officials in charge of disbursement. There are telephone numbers for such cases. However, P7 experienced that either the number did not work or he/she ended up with endless machine voice forwarding. Additionally, passing on such information can be potentially fatal for the person disclosing it.	<i>Fertiliser is usually imported in Nigeria and is therefore expensive, which is why the government subsidises it. The price of subsidized fertilizer is often inflated. P7 witnessed bags for 5000 (50% subsidized) Naira being sold for 6000 to 8000 Naira by the officials in charge of disbursement. There are telephone numbers for such cases. However, P7 experienced that either the number did not work or he/she ended up with endless machine voice forwarding. Additionally, passing on such information can be potentially fatal for the person disclosing it.</i>
C.6	P8	142. 344 355	-	Farmers usually rely on subsidised inputs by the government. Subsidy abuse happens by artificially	

				increasing the price, to which these inputs come to farmers.	
C.6	P8	143.	360 392	- Subsidy programmes are usually designed to benefit a certain favoured group, which are for instance friends or party loyalist of the respective decision makers. For instance, in the 2018 wheat planting season the Maize, Millet and Sorghum Farmers Association created a list of beneficiaries for a subsidy programme. The list was submitted to the government. When the list returned various names were replaced by the responsible officials. The association contested this and since they could not reach an agreement, farmers did not benefit.	
C.6	P9	144.	206 246	- When the e-wallet system was in place in Nigeria, companies faked figures to receive subsidies by the state. Most of the subsidies went to so called “briefcase farmers”, who were not actually farmers.	
C.6	P10	145.	40 44	- When the government tried to supply smallholders with credits, these funds were diverted.	<i>Construction/ Integration in C.6: P10, 174 - 194</i>
C.6	P10	146.	49 52	- This fertilizer does not reach the poor because it is diverted.	<i>Construction/ Integration in C.6: P10, 59 - 107</i>
C.6	P10	147.	59 107	- Subsidised fertiliser is still supplied by the government. The fertiliser does not benefit the smallholders because, firstly, the funds meant for the smallholders are shared among the responsible actors before they can reach the farmers. Or, secondly, the responsible actors in fertiliser distribution resell the subsidised fertiliser to the smallholders at a higher price. This situation is a widespread issue.	<i>Subsidised fertiliser is still supplied by the government. The fertiliser does not benefit the smallholders because, firstly, the funds meant for the smallholders are shared among the responsible actors before they can reach the farmers. Or, secondly, the responsible actors in fertiliser distribution resell the subsidised fertiliser to the smallholders at a higher price. This situation is a widespread issue.</i>
C.6	P10	148.	174 194	- The government fails to support smallholder farmers with low-, or interest free loans. Particularly vulnerable groups and women do not receive loans because the funds for this purpose are embezzled, or diverted.	<i>The government fails to support smallholder farmers with low-, or interest free loans or credits. Particularly vulnerable groups</i>

and women do not receive loans because the funds for this purpose are embezzled, or diverted.

C.6	P11	149. 248	224 248	-	Particularly before the introduction of the e-voucher system, fertilizer was resold to farmers at higher prices, by "farmers in suit", who are no real farmers but for instance in government. This practice was curtailed by the e-voucher system.
C.6	P12	150. 356	342 356	-	The distribution of farm inputs like fertilisers, tractors, cottages, milling machines, etc. is marked by corrupt practices, where, those inputs go for instance to middle men instead of farmers.
C.7	P1	151. 65	55 65	-	Many times, equipment is allocated regardless of the needs of smallholders. There were situations where small equipment for primary processing was given to smallholder just because they were from specific regions. The equipment was not utilized and thus others were deprived of this opportunity.
C.7	P1	152. 207	202 207	-	There is favouritism based on ethnicity and religion in the process of appointing officials as well as in the beneficiary's selection.
C.7	P1	153. 226	216 226	-	Favouritism based on ethnicity and religion is common and very visible government appointments and in the appointment of technical consultants as well as in the daily routine of administrative offices. This reduces the quality of the service provision to farmers, since the officials are not selected on the basis of their capacity.
C.7	P2	154. 172	168 172	-	Assigning contracts for the supply of fertilizer is the most effective way to secure political patronage in the north east.
C.7	P2	155. 207	204 207	-	If you do not bribe officials, you have to know somebody who is influential to receive fertilizer allocation.
C.7	P2	156. 290	262 290	-	Favouritism in the form of nepotism is everywhere in Nigeria. It is so prevalent that almost nothing is unaffected by it. If someone needs something from an official and they share certain characteristics such as ethnicity etc., it is most likely that the person will get what they want or need from the official, be it fertiliser, a

					voucher or something else. Fertiliser was repeatedly diverted by officials due to political interests.
C.7	P3	157.	300 312	-	In terms of service provision by the government, the northern Muslim areas receive more attention. The farmers there seem to be better off than farmers in the south.
C.7	P4	158.	116 155	-	Credit facilities might be in existence in Nigeria, but the bureaucrats would give it to friends, family or even members of the elite, who do not need such credits.
C.7	P4	159.	199 220	-	Usually there are not enough credits for everyone who needs such a credit. So, 400 to 500 people line up in front of these offices for credits that are meant for maybe five people. Officials will select according to religion, ethnic group, patrimonial relations, region or language. Even within religions, there is a distinction by orientation. Officials will prefer the people with whom they have the most in common. This system is so widespread that people see it as normal and do not even reprove it.
C.7	P4	160.	225 229	-	There is for instance ethnic, religious and regional favouritism as well as nepotism. This affect credit allocation as well as the appointment of people to certain positions. In both cases, favouritism negates an effective selection by qualification.
C.7	P4	161.	241 281	-	Favouritism also comes in the form of gerontocratic affinities and male chauvinism. Thus, older persons from the age of 60, who are in power positions in politics and bureaucracy favour their own age bracket. The issue of youth empowerment is usually used for election campaigns and dropped thereafter to continue the "old" practices of corruption, favouritism, regionalism, religion and nepotism. The young are disadvantaged by this system, which does not recognise the need for, for example, financial assistance nowadays. The bureaucracy is male dominated and sometimes men are favoured over women. Additionally, women are increasingly excluded from positions in the bureaucracy, since they are seen as inferior and incapable.
C.7	P4	162.	842	-	Favouritism can be based on how a person looks and

		865		behaves. If a person comes to a local government headquarter looking poor he has to wait, is send away, or has to pay a bribe to see the chairman. If a person arrives with a police escort etc., he/ she is directly invited to come in, no matter if the chairman knows this person or not.
C.7	P4	163. 989 - 1124		The north is favoured in terms of the required average marks for the admission into universities and secondary schools. This leads to educationally disadvantaged officials. The majority of security chiefs is from the north and 50 percent of the conditional cash transfer goes to one region. The ministries are not staffed based on merit. The political elites are exploiting in-group out-group divisions of the informal workforce for election purposes. Such divisions play a role for instance when indigenous groups hinder persons from other places, ethnicities or religions to participate in economic activities. Such divisions even result in xenophobic killings.
C.7	P5	164. 106 - 124		Nepotism may be used to be favoured for support services like tractors in a particular local government area, where the number of tractors is insufficient to supply everybody.
C.7	P5	165. 164 - 185		Persons in charge of the fertilizer allocation process within the agricultural development programme favour their cronies.
C.7	P6	166. 137 - 139		Unqualified officials are employed because of nepotism, whereas qualified staff is left unappointed.
C.7	P6	167. 161 - 164		The diversion of benefits for smallholders to the non-agricultural sector serves in particular to settle party members of those responsible for distribution.
C.7	P6	168. 336 - 356		Positions of power are used to favour people of certain regions, ethnicities or religions. There are situations where this affects the distribution to smallholders to the disadvantage of the public. Such cases are very common. In most cases connections in the aforementioned forms determine the allocation to smallholder, merit or due process does not usually come into play.
C.7	P7	169. 349 -		Fertilizer that is distributed to the local government is

Construction/ Integration in C.7:

			356		diverted. The chairman will share this fertilizer for instance among his family members. In Nigeria, you need to support the ruling party to get anything.				<i>P7, 397 - 421</i>
C.7	P7	170.	397 - 421	-	Farm inputs are often distributed to local government chairmen to provide it to farmers. The farmers are at the mercy of the chairman, who favours persons from his party or with good relations to him/her. Some states thus changed to a distribution through the state Agricultural Development Programme (ADP). This is supposed to be a reliable way for distribution, but is also affected by corruption.				<i>Farm inputs, like fertilizer, are often distributed to local government chairmen to provide it to farmers. The farmers are at the mercy of the chairman, who favours family, or persons from his party or with good relations to him/her. Some states thus changed to a distribution through the state Agricultural Development Programme (ADP). This is supposed to be a reliable way for distribution, but is also affected by corruption. In Nigeria, you need to support the ruling party to get anything.</i>
C.7	P7	171.	576 - 582	-	Today, only the north of Nigeria has irrigation systems. Northern leaders, who have led the country for most of its rule since independence, have favoured the north in terms of agricultural development.				
C.7	P7	172.	692 - 812	-	Officials from a certain religion tend to favour their religious counterparts. Since Buhari, a northerner and Muslim, is president, the farmer-herder conflict began. The Fulani herdsmen do not fear prosecution because they are from the same ethnic and religious group as most service chiefs. Additionally, in terms of education and job opportunities, the ethnicity of the incumbent president is favoured. Credits are given out without interest in the north due to the Islamic prohibition of interest. The key positions in the ministries and offices are occupied by northerners. Agricultural policies are tailored for the north, where farming is less fragmented and more mechanized, and applied for the whole country.				
C.7	P8	173.	360 - 392	-	Subsidy programmes are usually designed to benefit a certain favoured group, which are for instance				

				friends or party loyalist of the respective decision makers. There was a case in 2018, in which names on a beneficiaries list were replaced by the responsible authorities.	
C.7	P9	174. 311 321	-	Nepotism is a problem for everybody. However, not so much for smallholders, since if a farmer offers a good product, people will buy it.	
C.7	P10	175. 198 202	-	Nepotism is widespread. The current government favour the farmers who are supporters of the party or from the region of the responsible decision makers.	
C.7	P11	176. 249 267	-	Favouritism is very widespread and common. P11 reports the case of a Fulani herdsman who was not brought to court even though he had attacked farmers. Those responsible were from the same ethnic group, which is why he escaped prosecution. Other forms are the favouritism of certain groups by persons in authority, as well as the dissemination of information only to certain groups.	
C.7	P12	177. 606 608	-	Nepotism or favouritism is relevant in access to government programmes.	
C.7	P12	178. 620 630	-	Favouritism does not play a role during the selling and buying, or business process itself.	
C.8	P1	179. 274 289	-	P1 witnessed a situation where a road was built in a location where it was of no use to the farmers. There are roads that are inaccessible, have no benefit and thus deteriorate unused or are abandoned rather than completed. This happens because perhaps the costs are lower in that location or the costs can be inflated to derive certain benefits. This situation increases post-harvest losses as farmers cannot effectively transport their produce to markets.	Roads are built that are inaccessible, have no benefit to farmers (witnessed by P1) and therefore deteriorate unused or are abandoned rather than completed. This happens because perhaps costs are lower in that location or costs can be inflated to achieve certain benefits. This situation increases post-harvest losses as farmers cannot effectively transport their produce to markets.
C.8	P2	180. 633 665	-	If the government build, bulges and seemingly irrelevant projects, or white elephant projects, for instance a flyover for billions of Naira, that expenses are in competition with the farmer's needs. Especially since crude oil prices fell, the government is resource constrained. If the resources are allocated to beneficial	Especially since crude oil prices fell, the government is resource constrained. The expenses for seemingly irrelevant, bulges and expensive or white elephant projects like flyovers for billions of Naira are in competition

projects like infrastructure or the provision of basic farm inputs, it can improve market access of farmers.

with other infrastructure projects are the provision of farm inputs which may improve market access of farmers.

C.8 P3 181. 313 - There are many cases of deliberate waste in the form of abandoned projects. P3 witnessed the case of an industrial borehole for water supply which was supposed to be situated in a market area of a local government. The money was provided, but the project was not completed.
343

C.8 P4 182. 449 - When funds for projects are embezzled, they are not executed. This is affecting for instance infrastructure projects, which should give smallholders access to for instance cities, it is a major impediment for them.
456

C.8 P4 183. 888 - Costs for projects are inflated every year in every review process. People in office usually make long-term plans in order to increase funding, e.g. from the World Bank. For instance, if a hospital is abandoned, it has a direct impact on people's health care. Such cases are also a major obstacle to road infrastructure. Much of the deficit in road infrastructure can be explained by corruption. In such abandoned projects, the main executor of the project usually pockets the funds budgeted for the project. When auditors come, for example from the road maintenance department, they are settled.
983

C.8 P5 184. 300 - Different research institutes provide support services to farmers in Nigeria. These include trainings before the beginning of the harvest season (e.g. on new technologies) and the provision of inputs at subsidized rates. The research institutes receive funding from the government. However, every year this funding arrives too late to train farmers. The research institutes now randomly start projects to divert the funds and still receive funding for the coming year. The allocation of funds is deliberately delayed until the farmers no longer require assistance, so that the funds can be diverted.
347

Different research institutes provide support services to farmers in Nigeria. These include trainings before the beginning of the harvest season (e.g. on new technologies) and the provision of inputs at subsidized rates. The research institutes receive funding from the government. However, every year this funding arrives too late to train farmers. For instance, if 60 activities are planned for a

C.8	P5	185. 447 473	-	The untimely release of funds to government establishments such as agricultural research institutes is an example of deliberate waste. For instance, if 60 activities are planned for a year but the funds do not arrive until the middle of the year, 30 projects may already be skipped. The money is now partially invested in ineffective projects so that the institute does not have to return the funds to the government. This opens up opportunities for embezzlement and theft of funds.	<i>year but the funds do not arrive until the middle of the year, 30 projects may already be skipped. The funds are now partially invested in ineffective projects so that the institute does not have to return the funds to the government and still receive funding next year. This opens up opportunities for embezzlement and theft of funds. P5 opines that the allocation of funds is deliberately delayed until the farmers no longer require assistance, so that the funds can be diverted.</i> <i>Construction/ Integration in C.8: P5, 300 - 347</i>
C.8	P6	186. 135 137	-	Sometimes agricultural implements are bought and not allocated or deployed. Instead they are deposited in the ministries.	<i>Construction/ Integration in C.8: P6, 358 - 386</i>
C.8	P6	187. 358 386	-	Deliberate waste is happening at two levels in Nigeria. Firstly, in the distribution process, farm implements are left unused in warehouses or courtyard of some minister of agriculture. Secondly, there are projects which are abandoned. This happens because of various reasons, often because of the change of government. The funds have been allocated, but were not used for that purpose.	<i>Deliberate waste in Nigeria takes place at two levels. First, in the distribution process, when farm implements are bought but not allocated or deployed and are left unused in warehouses or courtyards of the ministry of agriculture. Secondly, there are projects that are abandoned. This happens for various reasons, often</i>

because of the change of government. The funds have been allocated but not used for that purpose. Projects that should take only month take years.

C.8	P8	188. 427 444	-	There was a case of the head of service, who bought a house above the market price. Additionally, this building was not needed for anything. The same happens to capacity building trainings etc.	There was a case of the head of service buying a house above the market price which moreover was not needed. The same thing happens with capacity building trainings etc.
C.8	P9	189. 278 307	-	Various projects are abandoned to keep budgeting and allocating money for it every year in order to create a "lifeline" for politicians. Such occurrences range from small water pipes to airports. Examples are markets, electricity projects or abattoirs.	
C.8	P10	190. 55 59	-	Projects, for instance for road, are abandoned and the remaining sum is shared among the responsible officials.	
C.8	P10	191. 206 217	-	Abandoned projects hinder economic growth and access to markets since the invested funds are lost and project for instance for rural infrastructure are not completed.	
C.8	P11	192. 268 281	-	Projects, for instance for roads are awarded every year because they are not completed. This affects the farmer's ability to receive information and inputs as well as to transport outputs.	
C.9	P1	193. 294 297	-	The funds that should be going into interventions for smallholder farmers is instead going into inflated costs for technical assistance. This denies smallholders access to high-quality inputs that would increase their productivity and improve smallholder incomes.	
C.9	P2	194. 668 706	-	The land use decree of 1978 stipulates that all land belongs to the government. Farmers only receive land when meeting certain requirements of people in office. Government officials across Nigeria own the vast majority of farm areas acquired with their social capital. Particularly in urban and peri-urban areas, farm land remains unused because the officials that received the land by questionable means of for instance personal	

				connections do not release it for cultivation.
C.9	P3	195.	348 - 356	The land tenure system in Nigeria is more a system of heritage. Land grants etc. are not really concerning smallholders.
C.9	P6	196.	277 - 305	Since 1978, the land allocation process is in the hands of the government. The government can acquire land for instance for the purpose of development. This applies for example for the restructuring and upgrading of infrastructural facilities and roads of former farm settlements. This right is sometimes abused, so that persons in power use their position to acquire land for themselves, instead for the public.
C.9	P7	197.	497 - 518	Salaries for senators or governors, for instance, are too high and continue to be paid long after resignation.
C.9	P9	198.	269 - 271	Legalized corruption is not an issue for smallholder since there is no transmission mechanism. Rather, it is an issue within the government.
C.9	P12	199.	211 - 222	Loan programmes have extremely high costs and there is often no clarity about the allocation of these funds. Corruption is built into these programmes. If legal such measures might be unethical or not constructive.
C.9	P12	200.	246 - 259	Land in Nigeria is vested in the state. As land distribution is changing with the growth of cities etc. areas are often given to cronies, or political allies of local and state officials.
C.9	P12	201.	272 - 338	Public office holders are not allowed to be in any business position except farming. Many politicians were granted land during their lifetime and the large farms were built and equipped by unexplained wealth. Thus, there are many famous politicians like Atiku Abubakar, Abdulsalami Abubakar and Olusegun Obasanjo who own large scale farms. There are many genuine farms as well as many that are used for money laundering. Everybody has a farm and scrutiny does not really exist. The large-scale farms, which work and are financed by unexplained wealth have a high cost advantage over their fellow farmers. The products from these professional farms, as well as imported

				products, are not only cheaper, but also of higher quality than the products of small farmers. Both large and small farms compete in local markets and the average Nigerian consumer is only interested in the product, not the origin, etc	
C.10	P4	202.	220 221	- Bureaucratic corruption is the most common form of corruption.	
C.10	P4	203.	381 383	- "It is believed that" corruption is a major impediment to economic, political and infrastructural development in Nigeria.	
C.10	P4	204.	585 652	- "The Nigerian government does not see the governance as a contract they see it as a right and they see it as an avenue for enrichment". Thus, money is embezzled from the state funds. Salaries in the education sector are very low, at about 1000 dollars a month for a professor. Thus, corruption in the education sector is likely to increase. Senators have a disproportionately high income. The political elite seems to be interested only in embezzling revenue from the exploitation of natural resources. They do not provide for the necessary infrastructure, whether roads, railways, airports or even electricity and water.	"The Nigerian government does not see the governance as a contract they see it as a right and they see it as an avenue for enrichment". Thus, state funds and revenues from the exploitation of natural resources are embezzled. The political elite does not provide for the necessary infrastructure, whether roads, railways, airports or even electricity and water. Additionally, due to low salaries, corruption in the education sector is likely to increase.
C.10	P4	205.	867 873	- You can find corruption like favouritism and extortion in every sector, where the state is involved.	
C.10	P5	206.	94 128	- A minority of farmers possess a competitive advantage over the others. They have comparably less transaction cost, can access markets better and control the market structure. There are a lot of opportunities in the form of support services for farming activities. For instance, in the local government areas farmers can access tractors. When it comes to gaining advantage in the process of receiving such limited support services through favouritism, bribery or other forms of corruption, the aforementioned group is better positioned to benefit from such opportunities, which in turn strengthens their position.	<i>Only few smallholders participate actively in markets. Those who participate are the wealthier ones, who possess a competitive advantage, due to comparably less transaction cost, better market access and control of the market structure. Facilitated through corrupt practices they can better access support services - such as tractors in local government areas. They are better positioned to receive such limited services</i>

C.10	P5	207. 294	289	-	Only few smallholders participate actively in markets. Those who participate are the wealthier ones, who are able to produce at lower transaction cost due to access to resources facilitated for instance by corrupt practices.	through favouritism, bribery or other forms of corruption, which in turn strengthens their position. Construction/ Integration in C.10: P5, 94 - 128
C.10	P6	208. 67	47	-	Actors that are essential to identify how and where corruption affects smallholder farmers along the agricultural value chain include agricultural input dealers who supply the inputs used by farmers; tractor hiring services and other farm implement providers who supply tools for mechanisation; actors in produce markets and credit provision; agricultural research for innovations and improved practices to increase productivity; agricultural extension services that convey knowledge about technologies and innovations; farm associations and cooperatives; transportation and communication facilities.	Bureaucratic corruption affects the market access of smallholders at several levels, both direct and indirect. Whatever applies to any actor in the value chain also affects the smallholder farmer. These actors, essential to identify how and where corruption affects smallholder farmers along the agricultural value chain, include agricultural input dealers who supply the inputs used by farmers; tractor hiring services and other farm implement providers who supply tools for mechanisation; actors in produce markets and credit provision; agricultural research for innovations and improved practices to increase productivity; agricultural extension services that convey knowledge about technologies and innovations; farm associations and cooperatives; transportation and communication facilities. One of the direct effects is the poor road network and other rural infrastructure. Construction/ Integration in
C.10	P6	209.	88	-	Bureaucratic corruption affects the market access of	Construction/ Integration in

		98			smallholders at several levels, both direct and indirect. Whatever applies to any actor in the value chain also affects the smallholder farmer. One of the direct effects is the poor road network and other rural infrastructure.		<i>C.10: P6, 47 - 67</i>
<i>C.10</i>	P6	210.	109 - 111		In most cases projects of roads and rural infrastructure are awarded but not implemented due to bureaucratic corruption.		
<i>C.10</i>	P6	211.	168 - 174		It happens that policies and connected projects that are supposed to benefit farmers are not implemented because "something" happens to the funds.		
<i>C.10</i>	P6	212.	178 - 184		By not using or deploying security funds appropriately, the security situation for farmers, especially in the case of the herdsmen brutality, is compromised.		
<i>C.10</i>	P6	213.	203 - 207		When officials are involved in bribery and other such practices it affects the farmers' ability to produce and thus ultimately their ability to ensure food security.		
<i>C.10</i>	P7	214.	421 - 439		Corruption is everywhere and inevitable. Wages are not sufficient at the end of the month, so corruption is inevitable as compensation. The government should introduce housing programmes and similar measures to reduce the pressure on civil servants.	Salaries for civil servants are insufficient and thus corruption is everywhere and inevitable	
<i>C.10</i>	P8	215.	171 - 190		Every year, the government reserves hundreds of millions for programmes. However, there is no information about the activities carried out under these programmes. For both the programmes for the promotion of various crops and those for the development and promotion of smallholder value chains, it is unclear whether and which activities take place. There is no impact evaluation. In particular, there do not seem to be any activities within the value chain promotion programme. This hinders farmers from new value addition.	Every year, the government reserves hundreds of millions for programmes. However, there is no impact evaluation or even information about the activities carried out under such programmes such as programmes for the promotion of various crops and those for the development and promotion of smallholder value chains. Particularly within the latter there seem to be no activities, hindering farmers from new value addition.	
<i>C.10</i>	P9	216.	56 - 89		The main problems are the capacity of the state and the lack of access to finance due to institutional failures and corruption. The system does not work as efficiently as it should. This affects funding for farmers, storage opportunities and road infrastructure for	The main problems are the capacity of the state and the lack of access to finance due to institutional failures and corruption. These inefficiencies affect funding for farmers, for	

				instance.	instance storage opportunities and road infrastructure.	
C.10	P11	217. 198 213	-	P11 witnessed a project, where rice farmers should have been supported in the process of land preparation, including provision of tractors and organisation of clusters. The project was not implemented even though the money was released.		
C.10	P12	218. 103 169	-	Bureaucratic corruption can be divided into three levels. Large-scale embezzlement and diversion of funds that occur due to a lack of transparency and accountability can be attributed to the strategic level. This could be, for instance, large schemes to support commercialisation projects in agriculture. The implementation level is called the operational level. This can be at the level of management of the implementation of training and loan programmes involving, for example, fake farms or agricultural trade organisations. The lowest level is the tactical level, where interpersonal interaction with farmers takes place. This includes tactics such as ad hoc taxes, extortion, bribery, etc.		
C.10	P12	219. 356 385	-	When government programmes, such as those to promote the processing of agricultural products, are mismanaged or even fail, the losses can be considered as opportunity costs. The return, the benefit that the programme could have brought if corruption had not been a factor. Since most Nigerian smallholder farmers live in abject poverty, they are very vulnerable to any sort of bribery or extortion.		<i>Construction/ Integration in C.10: P12, 548 - 585</i>
C.10	P12	220. 483 508	-	Particularly auto-corruption, legalized corruption and deliberate waste affect the overall market picture in Nigeria in terms of high opportunity cost. For instance, the cassava bread programme, which does not achieve anything but continue to function as a source of salaries and stipends etc.		<i>Construction/ Integration in C.10: P12, 548 - 585</i>
C.10	P12	221. 548 585	-	Auto-corruption and deliberate waste affect smallholder farmers through high opportunity costs. The programmes could have a positive effect on smallholders' market access if they were implemented properly. In addition, smallholders lose confidence in these		<i>Auto-corruption, legalized corruption and deliberate waste affect the overall market picture through high opportunity costs. The programmes could have a</i>

programmes. As this has been a problem for years, it is becoming increasingly unlikely that smallholders will bother to participate in such programmes.

positive effect on smallholders' market access if they were implemented properly. For instance, the cassava bread program, which does not achieve anything but continue to function as a source of salaries and stipends etc. In addition, as this has been a problem for years smallholders lose confidence and are thus unlikely to participate in these programmes. Additionally, since most Nigerian smallholder farmers live in abject poverty, they are very vulnerable to any sort of bribery or extortion.

C.11 P2 222. 359 - Agents of large companies usually patronize markets at certain intervals. These days are usually not publicly known. After their arrival during the day, the prices become exorbitant, since they buy large amounts of commodities. The cost might for instance increase by 20 percent over five hours. Thus, people obtain information about the arrival times through bribery.
400

C.11 P3 223. 271 - Rural non-organised smallholders are not likely to know what a subsidy is, or how to access such opportunities. Subsidies usually concern small-scale, or mid-sized farmers, who are organised in a cooperative. Subsidy abuse in this case refers to funds received in the name of the cooperative, where only a few influential farmers within the cooperative benefit by diverting these funds for private purposes.
298

C.11 P4 224. 456 - Smallholders are usually organised to represent their interests and to strengthen their negotiation position. They select persons as representation.
494

Smallholders are usually organised to represent their interests and to strengthen their negotiation position. Such organisations have selected representatives or leaders, who may abuse their position to exploit

						<i>the farmers by corrupt practices in the form of fines, registrations and levies. The government may intervene to support the election of leaders or they may even impose such leaders on the smallholders.</i>
C.11	P4	225.	499 522	-	Farmer's interest organisations have selected leaders, who may abuse their position to exploit the farmers by corrupt practices in the form of fines, registrations and levies. The government may intervene to support the election of leaders or they may even impose such leaders on the smallholders.	<i>Construction/ Integration in C.11: P4, 456 - 522</i>
C.11	P4	226.	691 722	-	When waste management is outsourced to private companies, the environmental management agency cannot interfere if the companies exploit or overcharge the people. The companies have paid the agency up front and can thereafter exploit the people to recover the money.	
C.11	P4	227.	739 759	-	In the process of building a house, organised youth will come to extort money. If the money is not paid they may use threats, harassment, stealing or even kidnapping to enforce payment. P4 particularly mentions this practice in connection with Abuja, Lagos and Port Harcourt.	In the process of building a house in metropolitan areas, organised youth will come to extort money. If the money is not paid they may use threats, harassment, stealing or even kidnapping to enforce payment.
C.11	P6	228.	114 122	-	Adulterated chemicals and farm inputs are sold to farmers by the private sector. This also involves the government, as it is now again involved in the distribution of fertiliser.	
C.11	P6	229.	476 479	-	Farmers are also involved in corrupt practices.	
C.11	P7	230.	445 475	-	Farmers can obtain loans from agro-dealers in the form of inputs. After the harvest season, farmers pay back with the goods they produce. Sometimes farmers cheat the agro-dealers, for example, with bags that are only partially filled with real produce. When this happens, the trader will naturally stop giving loans to such farmers.	
C.11	P8	231.	225	-	If there is private to private corruption it happens	

		231		between the farmers and the middlemen. However, it is likely that this is on a very low level.	
C.11	P9	232. 321	311 -	Favouritism is not a big issue for farmers, apart from instances, where certain persons create markets only for their respective groups of for instance ethnicity. Such markets may be for instance for particular crops etc.	<i>Favouritism is not a big issue for farmers, apart from instances, where certain persons create markets (e.g. for certain crops) only for their respective groups of for instance ethnicity. There is a coded way to exclude other people from these markets. If other people come there is an internal mechanism to frustrate the newcomers. One mechanism might be to offer at significantly lower prices.</i>
C.11	P9	233. 337	329 -	There is a coded way to exclude other people from particular markets of certain groups. If other people come there is an internal mechanism to frustrate the newcomers. One mechanism might be to offer at significantly lower prices.	<i>Construction/ Integration in C.11: P9, 311 - 321</i>
C.11	P10	234. 174	156 -	When farmers receive loans for a certain activity, they often use them for another purpose and do not want to or cannot pay them back. This is possible, among other reasons, because monitoring does not work properly.	

Annex II Interview Guidelines

Before the first interview (21.08.2020):

The present study will examine how bureaucratic corruption affects the market access of small farmers in Nigeria. In other words, what role the aforementioned corruption plays and how it operates in this context. It is used for fulfilment of requirements by the master module for the completion of the study programme "Transition Management MSc" at the Justus Liebig University Giessen. Three major questions and 18 possible follow up questions will be asked to you. You can always decide if you want to answer a question or not. In case a question seems irrelevant to you, do not hesitate to indicate this.

Two basic concepts are used in this guideline:

- Market access, here defined as the breakthrough from obstacles that hinder smallholder farmers from market participation.
- The investigation on corruption in this research focusses on "bureaucratic Corruption". This concept excludes all elected officials and solely refers to the administrative structures in Nigeria, from police to higher officials. As is it sometimes included, it must be noted, that private to private corruption is excluded. However, this explicitly does not exclude corrupt practices in the private sector, which involve public officials.

The interview will start with relatively open questions on corruption and market access. These will provide the opportunity to focus on your field of research/ profession/ experience. A number of possible follow up questions investigate corruption on the basis on a Nigeria specific taxonomy of corruption of Matthew Page. These questions are formulated as "platform-questions", which will provide a common knowledge base and then ask a simple question. This approach was selected because the taxonomy is a relatively new concept.

- a. According to your declaration of consent to the collection and processing of personal data for research purposes do you agree with the recording and transcription of the following interview?
- b. Do you agree to start the interview under these conditions or do you have further questions or inquiries?
- c. Would you be willing to shortly introduce yourself, your profession and experience?
(in case anonymisation "yes" add: according to your declaration of consent, this information will only be accessible to the correctors of the master thesis and the individuals needed for evaluation and accreditation)

In advance, to avoid any possible misunderstandings. The expression "how does... Affect" should neither be interpreted positively nor negatively. The expression reflects the question about the role of something or rather the character or way of something.

Thank you very much. So ...

1. What are the substantial market access constraints of smallholders in Nigeria?
2. How does bureaucratic corruption affect the market access of smallholders in Nigeria?
 - 2.1. Can you identify specific situations in the daily lives of smallholders, in which bureaucratic corruption directly involves smallholders?
 - 2.2. Can you identify specific situations, in which bureaucratic corruption affects smallholders indirectly, without the direct involvement of smallholders?
3. Follow up questions. Second level questions (3.1; 3.2 ...) are used in case the corrupt practices were not mentioned in the second question.

Third level questions (3.1.1; 3.1.2 ...) are used either as follow up to second level questions (3.1; 3.2 ...) or, in case the corrupt practice was mentioned in the second question, it is used as follow up questions for aspects mentioned in the second question.

- 3.1. Bribery is a consensual form of corruption. For instance, payments, gifts, or favours in exchange for improper or illicit benefit.
 - 3.1.1. How does bribery affect the market access of smallholders in Nigeria?
 - 3.1.2. From your point of view, how common and widespread are such situations?
- 3.2. Extortion is the use of threat to obtain a benefit like money, property or services.
 - 3.2.1. How does extortion affect the market access of smallholders in Nigeria?
 - 3.2.2. From your point of view, how common and widespread are such situations?
- 3.3. Auto-corruption is a one-way flow of benefit and involves embezzlement, property misappropriation, salary fraud, and revenue diversion.
 - 3.3.1. How does auto-corruption affect the market access of smallholders in Nigeria?
 - 3.3.2. From your point of view, how common and widespread are such situations?
- 3.4. Contract fraud is malfeasance in the context of government contracts.
 - 3.4.1. How does contract fraud affect the market access of smallholders in Nigeria?
 - 3.4.2. From your point of view, how common and widespread are such situations?
- 3.5. Subsidy abuse relates to malfeasance related to financial concessions such as subsidies, grants or tax waivers.
 - 3.5.1. How does subsidy abuse affect the market access of smallholders in Nigeria?

- 3.5.2. From your point of view, how common and widespread are such situations?
- 3.6. Nepotism or favouritism is related providing benefits on the basis of for instance religion or ethnicity.
 - 3.6.1. How does nepotism affect the market access of smallholders in Nigeria?
 - 3.6.2. From your point of view, how common and widespread are such situations?
- 3.7. Deliberate waste is the investment of money in projects which are either abandoned or of little socioeconomic value in order to create opportunities for corruption.
 - 3.7.1. How does deliberate waste affect the market access of smallholders in Nigeria?
 - 3.7.2. From your point of view, how common and widespread are such situations?
- 3.8. Legalized corruption comes in the form of legal benefits like excessive pay, land grants or gratuities like allowances etc.
 - 3.8.1. How does legalized corruption affect the market access of smallholders in Nigeria?
 - 3.8.2. From your point of view, how common and widespread are such situations?

After the first interview (21.08.2020):

The present study will examine how bureaucratic corruption shapes the market access of small farmers in Nigeria. In other words, what role the aforementioned corruption plays and how it operates in this context. It is used for fulfilment of requirements by the master module for the completion of the study programme "Transition Management MSc" at the Justus Liebig University Giessen. Four major questions and 18 possible follow up questions will be asked to you. You can always decide if you want to answer a question or not. In case a question seems irrelevant to you, do not hesitate to indicate this.

Two basic concepts are used in this guideline:

- Market access, here defined as the breakthrough from obstacles that hinder smallholder farmers from market participation.
- The investigation on corruption in this research focusses on "bureaucratic Corruption". This concept excludes all elected officials and solely refers to the administrative structures in Nigeria, from police to higher officials. Considering the privatisation of governmental services to for instance companies, banks, private extension services or parastatals you may also include private to private corruption if you consider it as relevant.

The interview will start with relatively open questions on corruption and market access.

These will provide the opportunity to focus on your field of research/ profession/ experience. A number of possible follow up questions investigate corruption on the basis on a Nigeria specific taxonomy of corruption of Matthew Page. These questions are formulated as "platform-questions", which will provide a common knowledge base and then ask a simple question. This approach was selected because the taxonomy is a relatively new concept.

- a. According to your declaration of consent to the collection and processing of personal data for research purposes do you agree with the recording and transcription of the following interview?
- b. Do you agree to start the interview under these conditions or do you have further questions or inquiries?
- c. Would you be willing to shortly introduce yourself, your profession and experience?
(in case anonymisation "yes" add: according to your declaration of consent, this information will only be accessible to the correctors of the master thesis and the individuals needed for evaluation and accreditation)

Thank you very much. So ...

1. What are the substantial market access determinants of smallholders in Nigeria?
2. How does bureaucratic corruption shape the market access of smallholders in Nigeria?

- 2.1. Can you identify specific situations in the daily lives of smallholders, in which bureaucratic corruption directly involves smallholders?
 - 2.2. Can you identify specific situations, in which bureaucratic corruption shapes the market access smallholders indirectly, without the direct involvement of smallholders?
3. Follow up questions. Second level questions (3.1; 3.2 ...) are used in case the corrupt practices were not mentioned in the second question.

Third level questions (3.1.1; 3.1.2 ...) are used either as follow up to second level questions (3.1; 3.2 ...) or, in case the corrupt practice was mentioned in the second question, it is used as follow up questions for aspects mentioned in the second question.

- 3.1. Bribery is a consensual form of corruption. For instance, payments, gifts, or favours in exchange for improper or illicit benefit.
 - 3.1.1. How does bribery shape the market access of smallholders in Nigeria?
 - 3.1.2. From your point of view, how common and widespread are such situations?
- 3.2. Extortion is the use of threat to obtain a benefit like money, property or services.
 - 3.2.1. How does extortion shape the market access of smallholders in Nigeria?
 - 3.2.2. From your point of view, how common and widespread are such situations?
- 3.3. Auto-corruption is a one-way flow of benefit and involves embezzlement, property misappropriation, salary fraud, and revenue diversion.
 - 3.3.1. How does auto-corruption shape the market access of smallholders in Nigeria?
 - 3.3.2. From your point of view, how common and widespread are such situations?
- 3.4. Contract fraud is malfeasance in the context of government contracts.
 - 3.4.1. How does contract fraud shape the market access of smallholders in Nigeria?
 - 3.4.2. From your point of view, how common and widespread are such situations?
- 3.5. Subsidy abuse relates to malfeasance related to financial concessions such as subsidies, grants or tax waivers.
 - 3.5.1. How does subsidy abuse shape the market access of smallholders in Nigeria?
 - 3.5.2. From your point of view, how common and widespread are such situations?

- 3.6. Nepotism or favouritism is related providing benefits on the basis of for instance religion or ethnicity.
 - 3.6.1. How does nepotism shape the market access of smallholders in Nigeria?
 - 3.6.2. From your point of view, how common and widespread are such situations?
 - 3.7. Deliberate waste is the investment of money in projects which are either abandoned or of little socioeconomic value in order to create opportunities for corruption.
 - 3.7.1. How does deliberate waste shape the market access of smallholders in Nigeria?
 - 3.7.2. From your point of view, how common and widespread are such situations?
 - 3.8. Legalized corruption comes in the form of legal benefits like excessive pay, land grants or gratuities like allowances etc.
 - 3.8.1. How does legalized corruption shape the market access of smallholders in Nigeria?
 - 3.8.2. From your point of view, how common and widespread are such situations?
4. Would you like to add anything?

Annex III Coding guideline

The latter codes are derived from the previous sub-questions: Question 1, which is based on “market access” (see chapter 2.2); Questions 3.1 – 3.8, which are based on the eight categories of Page (2018) (see chapter 2.3). The column “definition” also includes the most significant reference, from which the respective question and thus category is derived.

Category	Definition	Key/ anchor examples	Coding rules
C.1 Market Access determinants	“Market access relates to the breakthrough from obstacles that hinder small-holder farmers’ market participation” (Ngqangweni et al., 2016, p.2)	P5, 39 – 86 P3, 72 – 77 P1, 46 – 52	Category C.1 includes all explanations concerning market access, which are not directly linked to any sort of corruption.
C.2 Bribery	Bribery is a consensual form of corruption involving payments, gifts, or favours in exchange for improper or illicit benefit. (Page, 2018, p. 17)	P5, 194 – 225 P6, 190 – 198 P8, 207 – 210	Category C.2 includes all instances and explanations of bribery. This includes all instances of implied consensual but unofficial payments in order to gain any benefit.
C.3 Extortion	Extortion is the use of threat or coercion to obtain a certain benefit (Page, 2018, p. 18) – generally applies for C.3.1, C.3.2, C.3.3	No reference found	C.3 applies when there is any type of extortion that does not fall into any of the subcategories covered under C.3.
C.3.1 Extortion transport	Include all examples, which take place on the road or during transport.	Inductive Category Consult: Annex IV	C.3.1 applies to all instances of extortion taking place during movement, transport etc.
C.3.2 Extortion market	Include all examples which take place on	Inductive Category Consult: Annex IV	C.3.2 applies to all instances of extortion, that take place on (physical) markets.
C.3.3 Extortion service provision	Include all examples in the service provision of the bureaucracy	Inductive Category Consult: Annex IV	C.3.3 applies to all instances of extortion in the administrative service provision or service delivery.
C.4 Auto-corruption	Auto-corruption is a one-way flow of benefit to corrupt officials. (Page, 2018, p. 19)	P1, 208 – 214 P12, 462 – 471 P2, 407 – 459	C.4 relates to all cases of embezzlement, property misappropriation, salary fraud and revenue diversion (Page, 2018, p. 19) within the definition of C.4.
C.5 Contract Fraud	Contract fraud is malfeasance in the context of government contracts. (Page, 2018, p. 20)	P1, 234 – 256 P4, 448 – 456 P7, 582 – 642	C.5 relates to cases such as unnecessary procurement, unqualified contractors, conflicts of interest, weak oversight, contract inflation, bid manipulation (Page, 2018, pp. 20-21) or any other kind of malfeasance in the context of government contracts, where the corrupt practice occurs - particularly in the contracting and awarding phase.
C.6 Subsidy Abuse	Subsidy abuse relates to malfeasance related to financial concessions. (Page, 2018, p. 21)	P2, 494 – 500 P6, 123 – 133 P7, 169 – 209	C.6 relates to any malfeasance regarding grants, aid, or subsidies (Page, 2018, p. 21). In differentiation to C.5, subsidy

			abuse mostly occurs in the implementation phase of the programme.
C.7 Favouritism	Favouritism includes nepotism, favouritism on the basis of for instance religion or ethnicity (Page, 2018, p. 22). It might also relate to unfair favouritism towards any person or group (Amundsen, 2019, pp.17–18)	P1, 202 – 207 P2, 262 – 290 P4, 241 – 281	C.7 relates to all instances of favouritism. Since favouritism was observed to play a role in many other codes, the separation should follow an additional rule: If there are particular processes or effects that relate to another kind of corruption, it will be shortened to the essential facts relating to favouritism. There may be references to such processes found in other codes.
C.8 Deliberate Waste	Deliberate waste is the investment of money in projects which are either abandoned or of little socioeconomic value in order to create opportunities for corruption (Page, 2018, p. 23)	P2, 633 – 665 P3, 313 – 343 P6, 358 – 386	C.8 relates to all abandoned projects and wastages which create, or have potential to create opportunities for corruption. The diversion of funds connected with abandoned projects does also belong to C.8 when it does not fall under C.5..
C.9 Legalized Corruption	Forms of self-enrichment, that are not necessarily illegal, but perceived as corruption. (Page, 2018, p. 24)	P6, 277 – 305 P12, 246 – 259 P12, 272 – 338	C.9 particularly relates to land grants, excessive pay, gratuities (Page, 2018, p. 24) and other instances of self-enrichment, that are legal, but facilitate corruption, as mentioned by Page (2018, p. 24) in the case of land grants.
C.10 Corruption general	C.10 relates to any mentioning of corruption, or corrupt practices, which does not fit into other categories.	Inductive Category Consult: Annex IV	General insights into the effects of corruption, which cannot be clearly attributed to any other particular form of corruption, or code. Additionally, statements that are generalized for various forms of corruption and do not include further specific explanations, are included.
C.11 Corruption private	Private to private corruption relates to corruption between private actors.	Inductive Category Consult: Annex IV	Private actors, that may act in a private or public function. All cases of private to private corruption are to be included.

Annex IV Inductive code construction

P. Nr.	Line Nr.	Paraphrase	Generalisation	Reduction/ Combination
P2	299 - 303	Farmers have to pay money at every checkpoint mounted by different security personnel.	Farmers are extorted at checkpoints on the road.	C.3.1 Extortion transport
P6	150 - 154	The most common case of extortion is by law enforcement agencies. They extort farmers at road checkpoints.	Farmers are extorted at checkpoints on the road.	
P9	136 - 144	Due to their perishable produce Farmers are forced to settle extortion at road checkpoints.	Farmers are forced to pay, when extorted during transport.	
P10	112 - 118	There are people on the market who collect illegal payments from persons who are selling their produce.	Farmers are extorted on markets.	C.3.2 Extortion market
P2	93 - 95	There are local authorities who have an informal way of collecting tax from communities.	Local authorities are collecting informal taxes.	
P1	106 - 108	Inspectors, particularly for livestock, extort farmers on markets.	Inspectors extort farmers on markets.	
P3	95 - 101	For their services, extension officers are requesting money from smallholders.	Extension officers extort money from smallholders.	C.3.3 Extortion service provision
P6	122 - 123	Smallholders who want to access a credit are extorted by credit officers.	Credit officers extort money from smallholders.	
P4	307 - 314	Smallholders may even borrow money to settle extortion in service delivery.	Smallholders may borrow money to settle extortion in service delivery.	
P6	203 - 207	Bribery and other corrupt practices of officials constrain farmers ability to produce.	Corrupt practices constrain farmers.	C.10 Corruption
P7	421 - 439	Since salaries for officials are insufficient, corruption is inevitable.	Insufficient salaries make corruption inevitable.	
P4	220 - 221	The most common form of corruption is bureaucratic corruption.	The most common form of corruption is bureaucratic corruption.	
P4	691 - 722	When state services are privatized, these companies can exploit their position unchecked.	Privatization leads to uncontrolled exploitation by these companies	C.11 Private-to-private corruption
P8	225 - 231	Private to private corruption occurs between farmers and middlemen.	Private to private corruption occurs between farmers and middlemen.	
P9	311 - 321	There is favouritism between groups in markets, where groups are excluded from certain products.	There is favouritism between groups in markets.	

Annex V Declaration of consent

The declaration of consent, to be found on the following page, is based on the current German data protection regulations “*Datenschutzgrundverordnung (DSGVO)*” (translated with: “General Data Protection Regulation GDPR”). The latter was adapted and translated from Dresing and Pehl (2020) verified with the current legislation (intersoft consulting, n.d.).

A. Subject of the research project and basis of the declaration of consent

1. Research Project:

Bureaucratic Corruption and Market Access. The Case of Smallholders in Nigeria.

2. Description of the research project:

The aim of the study is to identify how bureaucratic corruption affects the market access of smallholders in Nigeria. It is based on qualitative interviews.

3. Person responsible for execution and interviewer*:

Marvin Ulrich Lantz

4. Nature of the personal data:

Common categories of personal data¹:

- Name, address, telephone number, e-mail, age, marital status, date of birth

Special categories² of personal data:

- political opinion

- religious or philosophical conviction

- Trade union membership

- Further see Footnote¹

Recordings, in particular

- Sound recordings (and full transcription)

- Video recordings

**see below for the date of the interview*

B. Declaration of consent and information on the collection of personal data

1. Declaration of consent

I hereby agree that the personal data of my person, collected in the context of the research project described under A., in the form of original recordings of the interview(s) and their transcript(s) to "Marvin Ulrich Lantz" may be processed for the description of the purposes according to item 2. If I indicate or have indicated special categories of personal data, these are covered by the declaration of consent.

Your consent is voluntary. You may refuse consent without incurring any disadvantages.

You can revoke your consent at any time vis-à-vis Marvin Ulrich Lantz, with the consequence that the processing³ of your personal data, in accordance with your declaration of revocation, will be inadmissible by him for the future. However, this does not affect the legality of the processing carried out on the basis of your consent until revocation.

Relevant definitions of the data protection terms used are contained in the Footnote^{1,2,3,4} Definitions.

2. Purpose of the data processing / objective of the project

The aim of the project is to identify how bureaucratic corruption affects the market access of smallholders in Nigeria. To investigate on the latter qualitative interviews are conducted. This includes videocall/ voice call, full transcription and processing according to qualitative analysis. The data is used for the full/ partial fulfilment of a master module of the Justus-Liebig-University Giessen, Germany.

3. Legal basis

Marvin Ulrich Lantz processes the personal data collected from you on the basis of your consent in accordance with Art. 6 Para. 1 lit. a GDPR. If special categories of personal data are involved, Marvin Ulrich Lantz processes the personal data collected from you on the basis of your consent in accordance with Art. 9 Para. 2 lit. a GDPR.

4. Recipients or categories of recipients / transfer to third countries

4.1 Your personal data and Recordings will be transmitted or may be transmitted by Marvin Ulrich Lantz to the following recipients or categories of recipients: Prof. Dr. Martin Petrick and other correctors of the master thesis as well as any other responsible person required for evaluation and accreditation. 4.2 In case Anonymisation is not requested, the name and references to the identity of the respective interviewee may be published, or made available to any interested reader of the thesis.

**see below for Anonymisation*

5. Duration for which the personal data are stored / criteria for determining the duration

For the duration of the Master's thesis and the necessary storage of the data for possible queries, a maximum of 2 years after submission.

6. Your rights

Within the framework of the legal requirements, you have a fundamental claim against Marvin Ulrich Lantz:

a. Confirmation as to whether personal data concerning you is being processed by Marvin Ulrich Lantz,

b. Information about these data and the circumstances of the processing,

Correction where these data are incorrect,

c. Deletion, insofar as there is no justification for the processing and no obligation to retain (any longer),

d. Restriction of processing in special cases determined by law; and

e. Transmission of your personal data - if you have provided it - to you or a third party in a structured, common and machine-readable format.

In addition, you have the right to revoke your consent to Marvin Ulrich Lantz at any time, with the consequence that the processing of your personal data, in accordance with your declaration of revocation, will become inadmissible by Marvin Ulrich Lantz for the future. However, this does not affect the lawfulness of the processing carried out on the basis of your consent until revocation.

Finally, we would like to inform you of your right of complaint to a supervisory authority.

7. No automated decision making (including profiling)

Your personal data will not be processed for the purpose of automated decision making (including profiling) pursuant to Art. 22 Para. 1 and Para. 4 GDPR⁶.

Date of the Interview: _____

First name, last name in block letters

Place and date

Signature

Anonymisation⁵

- I would like my name and all references to my identity to be anonymised for all persons with the exception of those listed under 4.1.
- It is not necessary to make my name and all references to my identity anonymous to all persons except the persons listed in 4.1.

¹ - Pursuant to Art. 4 No. 1 GDPR, 'personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

² - According to Art. 9 Para. 1 GDPR, "special categories" of personal data are data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation shall be prohibited, and the use of such categories of data is explicitly waived in this project.

³ - According to Art. 4 No. 15 GDPR, 'data concerning health' means personal data related to the physical or mental health of a natural person, including the provision of health care services,

which reveal information about his or her health status;

⁴ - According to Art. 4 No. 2 GDPR, 'processing' means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;

⁵ - Anonymisation exists if the personal reference to data is removed in such a way that it cannot be restored or can only be restored with a disproportionate expenditure of time, cost and manpower. See: BFDI 2020: Positionspapier zur Anonymisierung unter der DSGVO unter besonderer Berücksichtigung der TK-Branche. https://www.bfdi.bund.de/DE/Infothek/Transparenz/Konultationsverfahren/01_Konultation-Anonymisierung-TK/Positionspapier-Anonymisierung-DSGVO-TKG.html?nn=5216976 [29.07.2020].

⁶ - The translations from the original German sources (such as laws) in this document make no claim to completeness or accuracy. Please consult the original sources.

Annex VI Data Management Plan

This plan was completed in accordance with the recommendations for preparing a data management plan (DMP) from the Competence Center for Research Data (2020), Bielefeld University.

Description of the project: The project is a master thesis to be submitted for the partial fulfilment of master module requirements of the Justus-Liebig-University Giessen, Germany. The project has the name “Bureaucratic corruption and market access. The case of smallholder farmers in Nigeria”. The aim of the study is to identify how bureaucratic corruption affects the market access of smallholders in Nigeria. It is based on qualitative expert interviews. The envisaged duration of the writing process is from the 02.01.2021 to the 02.06.2021. Data collection started by the 21.08.2020. First attempts to contact potential interviewees started by the 24.04.2020. There is no funding to be reported.

Existing types of data: Existing data is drawn from published literature. These are used for theoretical and literary framing as well as interpretation of the collected data.

Data to be created in the project: The data is recordings from interviews with 12 participants. The formats are in MP3, WAV, M4A which stems from the usage of three programs used for recording, Windows 10 Voice Recorder, OBS Studio and Sound Recorder Android 8.1.0. The latter should compensate for technical errors and issues related to the sound quality of the recordings. The recordings originate from Skype, Zoom and WhatsApp calls – determined by the interviewees’ choice. The amount of recorded data is 3,87 GB. Immediately after the interviews the data was documented with a variety of information such as recording time, interviewee, date and time of the interview etc. – this data is available in the respective interview headers (Annex IX). This process aimed to ensure a full documentation of the recording process. The interview headers provide additional information about the recording situation etc.

Data organisation: The data was organised according to the respective interviewee and named with the pseudonym according to participant (P), number in alphabetical order of participants (“Number”) and number of recording within one interview – if necessary (“Number of recording”). The files were named as: pseudonym (number of recording)_date of recording. The data is stored locally and simultaneously on two different SSDs on one computer. There are no collaborative workflows to be reported.

Administrative and legal aspects: All legal aspects of data storage, recording, processing and sharing can be found in the “Declaration of consent to the collection and processing of personal data for research purposes” in Annex V. No recording data was stored in cloud-based services or similar technologies. The recorded data was stored locally and secured via contemporary security measures regarding Antivirus programs and appropriate password protections. Data

access and protection is clarified in the abovementioned declaration in accordance with the current German data-protection legislation as explained in Annex V.

Archiving, sharing, and publishing data: The recorded data will be shared in accordance with all persons listed under 4.1 in the "Declaration of consent to the collection and processing of personal data for research purposes" (ANNEX V). The data will be shared "offline" via a suitable storage medium. No further sharing is envisaged at this point.

Responsibilities and duties: The responsibility for data management lies exclusively with the author. All persons mentioned under 4.1 who abide by the rules set out in the "Declaration of Consent for the Collection and Processing of Personal Data for Research Purposes" are likewise responsible for the protection of the data copies from the time of handover (02.06.2021).

Costs and resources: All data related time and costs are covered by the author of this thesis.

Annex VII Rules of transcription

Gläser and Laudel (2009, p.193) conclude that there are no generally accepted rules for the transcription of interviews, so it is necessary to make and document one's own rules. The exact rules of transcription depend on the research objective. The authors explain their rules of transcription for reconstructing investigations. Reconstructing investigations focus on the origin of an effect and particularly asks about the process that brings about the investigated effect (ibid., p.69). Since this research focusses on both the origin as well as the process or mechanism of the effect of bureaucratic corruption on market access, it can be classified as a reconstructing investigation as well. Thus, like Gläser and Laudel (2009) this research works with expert interviews on a reconstructing investigation. This observation provides a guidance of how to transcribe generally. As Gläser and Laudel (2009, p.193) mention, if it is important how something is said, it is necessary to include all stutters and non-verbal utterances etc. They conclude that for reconstructing investigations these details are not necessary. However, since they only provide general guidance (ibid.), the transcription system will be adapted from Dresing and Pehl (2015, pp.28–30) who offer a simple transcription system, as suggested by Gläser and Laudel (2009, p.193). It will only be slightly changed and adapted to the present study's purpose. Firstly, instead of transcribing phonetically or in summary, it should be transcribed literally, whereas dialects are translated if there is an appropriate translation (e.g. all forms of "yea" or "yeah" etc. are simply written as "yes").

The sentence structure is maintained despite possible syntactic errors (Dresing and Pehl, 2015, p.28). If an explanation is needed it can be added as an author's comment in square brackets as suggested by Misoch (2015, p.261). Secondly, informal contractions are approximated to written language (e.g., "gonna" is written as "going to") (Dresing and Pehl, 2015, p.28), which is in line with Gläser and Laudel (2009, p.194) who suggest the use of standard orthography. Standard contractions from spoken language like can't, shouldn't etc. as for instance listed in the (Cambridge Dictionary, n.d. a) remain unchanged. Thirdly, Stutters, discontinued words or sentences are omitted, whereas half-sentences are transcribed and indicated by a "/". Word doublings are only transcribed if they are used for emphasis (Dresing and Pehl, 2015, p.28). The fourth rule says that in terms of punctuation a smoothed punctuation should be favoured, thus using periods rather than commas (ibid.). However, this rule is amended as exemplified by (Kuckartz, 2010, p.44), where punctuation is used as perceived by the transcriber. They are set according to the tone of the interviewee. This may have the advantage, that the transcriber can try to represent the spoken structure more accurately. Fifth, pauses are indicated by "(...)". Sixth, comprehension signals of the person who is not currently speaking are not transcribed (Dresing and Pehl, 2018, p.21). Only if a monosyllabic answer (not an interjection as a signal for comprehension) occurs, it will be transcribed and interpreted in parenthesis, for instance "Hmhm (affirmative) (Dresing and Pehl, 2015, pp.28–29). This rule

is extended by the suggestion of Kuckartz (2010, p.44), who states these utterances must be transcribed when the current speaker is interrupted in his speaking flow. This may support the understanding of discontinued contexts of meaning. Paraverbal utterances such as “hm” do not need to be transcribed as mentioned by Gläser and Laudel (2009, p.193), irrespective, if the person is the speaker or not. Special cases are “ehe” and “Zss”. “ehe” is a form of affirmative emphasis used in Nigeria and “Zss” is a whistling-hissing sound, which transports a meaning of disapproval for something (depending on the occasion). The latter observations were made by the interviewer during his stay in Nigeria. The here defined “Zss” sound has various meanings however, the so called “suck-teeth” transports disdain, mild disgust, sound of annoyance or displeasure as described by Rickford and Rickford (1976, p.304). Such special cases can be treated as suggested by Gläser and Laudel (2009, p.194) for non-verbal utterances, which means, as aforementioned, they are only transcribed if they change the meaning of a sentence.

Emphasised words are capitalized according to the seventh rule (Dresing and Pehl, 2015, p.29). The next rule states, that every speaker and every interjection receive a paragraph. The minimum requirement for time stamps is at the end of each paragraph. In order to increase readability and orientation in the text, the rule of a simple blank line between interviewer and interviewee is amended to using cursive text for the interviewer and normal text for the participant as suggested by Misoch (2015, p.261). In the ninth statement, Dresing and Pehl (2015, p.29) suggest to note every non-verbal utterance that contributes to the meaning of a statement, like laughter or sighs are transcribed in brackets. This corresponds to the suggestion to transcribe such utterances only when they change the meaning of a statement (Gläser and Laudel, 2009, p.194). In the tenth suggestion, Dresing and Pehl (2015, p.29) provide a way to indicate incomprehensible passages. They are marked as “(inc., reason)”, whereas “reason” is always replaced by the reason for the unintelligibility of the passage. They suggest a time stamp for all non-clear and incomprehensible passages and suggest to leave out the time stamp, if there is one within a minute. This paper will use a more restrictive approach reducing this rule to 5 seconds. This should support the transcriber to rehear the particular passage in case he should be able to comprehend it at another time. Assumed meanings are put in brackets with a question mark. The Interviewer is marked by an “I:” and the participant by a “P:” (ibid.) in order to simplify the orientation, “P” is extended by the number of the respective participant.

The last rule is, that the text file is saved according to the name of the audio file in .rtf format. For the present work, neither was of importance, as the transcriptions were merged in one document and the format was of no importance, since the data was coded manually. For overlapping speech Dresing and Pehl (2015, p.30) suggest a system without marking the actual speaker. From the first observations it was found that the speaker can actually be identified most

of the time – thus the speaker will be identified. It is marked as “I: //I would like to” and in a separate (the next) row “P1: // But you know”. Of course, since it is overlapping, it will have only one time-stamp at the end of the overlapping speech. To be able to properly cite and identify the interview passages, the lines are numbered as suggested by Misoch (2015, p.258).

As explained in the previous elaborations, the transcription is not verbatim in line with the suggestions of Gläser and Laudel (2009, p.193). Apart from the authors suggestions, a significant reason to avoid a verbatim transcription is that non-verbal signals bear the risk of being misinterpreted. Oliver, Serovich and Mason (2005, pp.1276–1277) describe this issue in an example of a team of researchers, who debated on sniffing during the interview. This is just an example for the danger of any attempt to interpret the content of a study. The interpretations ranged from drug use to crying. However, it cannot be ignored that such non-verbal data may provide cognitive and emotional hints (Novick, 2008). Thus, this study tries to include only signs which bear significance and are able to be interpreted unambiguously, such as laughter or emphasis.

Considering the previous explanations, the notation system can be summarised as follows:

Author's comment	[comment]
Discontinued Sentences	/
Utterances (interpretation)	According to tone “Mhm”, “Ehe”, “Zss” (affirmative/negative etc.)
Interviewer	I:
Interviewee/ Participant	P1/ P2/ P...
Incomprehensible	(inc., reason) hh.mm.ss
Pause	(...)
Overlapping speech	I: //I would like to P1: // But you know hh.mm.ss
Emphasized words	EMPHASIZED WORDS
Unclear words	(word?)
Long pauses (technical issues)	“hh.mm.ss ... hh.mm.ss”

Annex VIII Interview header

The interview header will be adapted to the requirements of the presents thesis from Reinders (2012, p.207). As implied by the latter and clarified by Misoch (2015, p. 259), the transcription header can be longer or shorter according to the needs of the study. Reinders (2012, p. 207) suggests to begin with the project identifier and recording number of the interview. The present study will replace this with the identifier of the interviewee. Thus, each interviewee is assigned an identifier as aforementioned in form of “P” for “Participant” and the respective number of the interview according to the alphabetic order of the interviewees (e.g. participant four would be “P4”). The recordings are numbered according to the interviewee (P1, P2, P...). In case there are several recordings, numbers in brackets are added for the number of recording within one transcript (P1(1), P1(2), P...). Additional information on the date of recording will be added to the file (e.g. P1(1)_02.10.2010).

The lines within a transcript are numbered consecutively (excluding the transcription headers). The reason for this is that in the course of the work it was found that this reduces the risk of confusion and mistakes. Since the recordings had very different conditions, each recording will be assigned a transcription header. The references to the transcripts (in the summary tables) are made per interview and according to the interviewee identifier as for instance “(P1, 640-710)”.

As intended by Reinders (2012, p. 207) the interview duration will be included whereas the name of the interviewer and transcriber are the same, since the process was completed by the author alone. The authors also suggest to replace the interviewees name by a synonym (in the present study, this function is provided by the interviewee's identifier). However, for the correction process of the thesis, the names will be included in the transcription header. Gender, age, educational level and origin of the interviewee (Reinders, 2012, p.207), was not assumed or inquired. The sex of a participant is noted to account for imbalances in the data set. Unfortunately, the sex distribution of the data set is skewed towards male participants. The explanation for this shortcoming is, that, even though many female experts were contacted, only two replied. Other information about the participants will be noted according to their function as an expert, which was relevant as selection criteria of the interviewee. The name and the relevant functions will be submitted according to the “Declaration of consent to the collection and processing of personal data for research purposes”, which was signed by the interviewees. There-with they agreed either no anonymisation, or to anonymisation except the correctors of this thesis (any person necessary for the correction and marking of the thesis). Therefore, the information of the interviewees is provided.

As intended by Reinders 2012, (2012, p.207) a brief characterisation of the atmosphere of the conversation will be included, whereby this should be extended to general remarks, in the form

of bullet points, including dialect, nervousness or particularities about expressions/speaking as used by Misoch (2015, p. 260), including particularities about the speaking, dialect, nervousness of the interviewee etc. Start and end of the transcription as well as time difference between interview and transcription (Reinders, 2012, p.207) will not be included. Because of the many disturbances and often poor sound quality, the transcripts were periodically corrected.

As suggested by Reinders (2012, p. 104), the evaluation took place in two phases - the first for the correction of the guideline and the second for the extensive and detailed evaluation. To account for the time difference between the interview and the final evaluation, postscripts were prepared in the first phase after the interviews. This contributes to the understanding of peculiarities and so forth (ibid., p.106). The postscripts can be found in the aforementioned general remarks. In the second phase of transcription, the rules of the aforementioned transcription system were applied. By this time, the transcriber was able to observe a remarkable improvement in comprehension skills concerning the particularities of the interviews with regard to colloquial language, dialect and sound quality. With the support of postscripts and preliminary transcriptions, the second phase produced significantly higher quality transcripts than in the first phase, as was intended.

A summary of the content of the interview and the explanation of the transcription system (ibid., 207) were not included. A summary was not prepared, as the risk-benefit trade-off spoke against such a summary. Reinders (2012, p.207) himself notes that reading the summary may already lead to priming of what is extracted from the interview, which could lead to perceptual selections. The transcription system does not need to be included since it is explained separately and consequently used throughout the entire data set. As all interviews took place digitally it seems appropriate to add other sections in order to ensure traceability.

Where Reinders (2012, p.207) suggest to state if the interview took place face-to-face or via telephone and if a guideline was used or not, this work requires other information to be added since, the guideline and video-conferencing software (with sound only) was used throughout the interviews. Thus, in order to adapt to the requirements of digital communication, further information will be added - such as communication software, recording program and sound quality.

Transcription header

Interviewee identifier:	PX
Recording number:	Rec. PX (Y)
Date, time, place:	dd.mm.jjjj, hh:mm:ss, place
Interview duration:	hh:mm:ss
Interviewer/transcriber:	Name of the author/interviewer/ transcriber
Interviewee:	Name of the Interviewee
Selection criteria:	Criteria used to select this interviewee
Sex:	Male/ Female
Communication software:	Application used for communication
Recording program:	Program used to record the interview
Sound quality:	Short description of problems with the sound quality
	...
General remarks:	Atmosphere, expression particularities, dialect, nervousness etc.
	...