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The Role of Agricultural Banks and Sustainable Agricultural Development: Evidence from a Farming Community in Libya

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Session 4: Water, Agriculture and the SDGs

Chaired by Dr. Abhishek Tiwary, IESD

Uncovering the Role of the Agricultural Bank in Fostering Sustainable Agricultural Development in Rural Area: Evidence from Libya

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Abstract:

Farmers and rural communities in developing countries encounter a broad range of challenges, including poverty, hunger, poor health and well-being, and climate change. In relation to sustainable agricultural development, farmers need to apply appropriate farming techniques and agricultural technologies that require a high level of investments. In Libya, the Agricultural Bank was founded to promote agricultural development that is both sustainable and improves the living standard of rural communities and farmers' welfare. The present study is focused on the role of the Agricultural Bank in the Jafara region to the South-west of Tripoli City in addressing the challenges of poverty, hunger, poor health and well-being, and climate change or not. Based on a mixed method approach, including 83 surveys and 26 interviews with farmers in the region, the study reveals that the Agricultural Bank has inadequate financial resources to improve the infrastructure, production and level of prosperity among farmers in the agricultural sector of the region. The paper concludes with some practical recommendations regarding how government and the Agricultural Bank can more effectively support sustainable agricultural development in the Jafara region and other rural area of Libya.

Keywords: Farmers; Sustainable Development Goals; sustainable agricultural development; water facilities; financial support.

1. Introduction:

The following sections presents more details about sustainable agriculture, the role of banks help farmers in rural areas of developing countries related to SDG's, and brief background on issues facing Libyan farmers.

1.1. Sustainability and sustainable agriculture in an arid rural area in developing countries related to SDGs:

Agriculture is recognized as a major source of GDP, providing employment for rural areas, in Africa and many other developing countries (Dercon & Christiaensen, 2011; Diao et al., 2008). It stimulates other sectors through generating a need for the inputs, machinery and service industries that support production in farming areas and how they might achieve sustainable agricultural development goals. While, the agricultural sector remains the main source of income in most rural areas of North Africa, during the 1990s agricultural output has decreased in part due to global warming and climate change (UNECA, 2009). With lower agricultural productivity many African farmers may be trapped into food insecurity and poverty for decades (UNECA, 2009). Furthermore, the UNECA report indicates that due to lower levels of agricultural production, farmers are often not motivated to take a deep interest in the cultiviation of fields because the profit margin is very low among the African countries. For instance, the production of grain crops in Ethiopia was around 1250 kg per hectare, while yields in the South and East of Asia increased from 2500 to 4500 kg per hectare in 2009 (UNECA, 2009). This is in large part due to the governments of South and East Asian countries investing a significant amount of funding to provide farmers with appropriate tools, techniques, and farming potential to improve agricultural practices and grow sustainable rural businesses (Dercon & Christiaensen, 2011; World Bank, 2009). Agriculture in Libya faces many challenges which will be explored in the following sections of the paper and considered alongside the current and potential role of the Agricultural Bank to address them.

1.2. The role of banks to help farmers in rural areas of developing countries related to SDGs:

The banking system has the ability to support sustainable agricultural development (SAD) through social, environmental and economic intervention (Khan et al., 20003). Specialist banks such as Agricultural Bank, Industrial Development Bank, Rural Bank wereestablished to support economic development in all sectors and complement the role of other banks by providing banking services geared towards providing loans to support the agriculture sector, help farmers and establish economically viable enterprises in rural areas that provide for the livelihoods of local communities and the protection of the environmental resources of regional communities (Sunildro Akoijam 2015). According to Bashir et al. (2010), agricultural credit for farmers is an essential source of increased agricultural productivity that can ultimately lead to broadening and improving the standard of living of local rural communities. Short-term agricultural credit has a significant impact on increasing wheat crop in District Punjab, Lahore, Pakistan. It has been used by the farmers in providing seeds of wheat, the fertilizer and irrigation. Furthermore, Geetha (2016) concluded that the regional rural banks in India played an important role in supporting the agricultural sector increasing productivity and economic growth.

Banks have succeeded in providing short term creditbanking facilities at very low rates of interest. The loans have been increased from 46% in 2002-2003 to 64% in 2008-2009to meet the financial and banking

needs for small and marginal farmers, agricultural laborers, artisans, landless farmers, small traders and small entrepreneurs in Shimogga region of India. Therefore, the banks' credit aids and loans are helping in creating employment; to increase the investments and boost prevent economic activities from the financial crises. For instance in Bangladesh (Sarker, Ghosh and Palit, 2015) studied the contribution of the banking sector in financing the agricultural sector and total agricultural output. And the study discovered that there is a solid relationship between the banking services financing in the agriculture sector and produce agricultural products. However, studies into the role of the banking sectors in financing the agricultural and industrial sectors in developing countries are still limited. The aim of this paper is to explore the challenges facing farmers in the Jafara region of Libya and how the Bank can help address the mand contribute to a more (SAD) for the Jafara region.

1.3. Brief background and issues facing Libyan farmers:

Libya is one of the North African countries that has suffered from a decline in agricultural production and degradation of water resources. Although the agriculture sector is the second largest sector in Libya, fertile agricultural land has decreased due to economic, social, financial, and environment agricultural challenges such as (water quality and availability, lack of Labors and lack of agricultural finance). This study has reported since 1990, most farmers have said there was a decline in the level of groundwater is gradually declining and exceeding 300 m under the earth's surface in Al-Azizia, Qasr Bin Ghashir and Al-Zahra areas, Farmers in the Janzour area suffer from groundwater pollution because of their proximity to the coastal area. The results of this study revealed that more than 44% of respondents were experiencing a lack of water in the four main areas of Jafara region, around 41% of farm owners in Jafara's rural areas are suffering from lack of labour and more than 68% of respondents in the four main areas are suffering from lack of and High Prices the Agricultural Inputs and Equipment. The arable land represents about 1.2% of the total area of Libya (Abdudayem, 2013; FAO, 2011).

According to FAO (2011), 95% of the Libya land is desert and farmers have not enough financial resources of government support to convert the unproductive agricultural land into productive agriculture land. Despite the government's focus on this sector through agricultural-led industrialisation (Kumati, 2008; Aridah 2016; Abuarosha, 2013), the rural community remains unable to produce enough sufficient agricultural production. Previous studies have identified that the lack of farmers' education, high levels of obsolete agricultural technologies, and lower level of Libyan government support are the main challenges to agricultural production and reduce the level of poverty among farmers (Park & Carolina, 2016; Aridah, 2016; Allafi 2014; Abuarosha, 2013). Prior to exploring the challenges facing farmers in the Jafara region the next section will consider the research methodology. Section (5) will then explore the role of the Agricultural Bank before a final discussion considers how the Bank might address some of these challenges and makes some policy recommendations relating to this.This paper focused to identify the current challenges facing farmers in the region and how the Agricultural Bank can more effectively support sustainable agricultural development in the Jafara rural area of Libya.

2. Methodology:

This paper focused to identify the current challenges facing farmers in the region and how the Agricultural Bank can more effectively support sustainable agricultural development in the Jafara rural area of Libya. The paper is based on a mixed method approach, including 83 surveys and 26 interviews

with farmers in the region. Over eighty questionnaires were completed by agricultural workers to explore challenges the political, financial, technological, government, and socio-cultural challenges in agricultural sector and to understand the role of the Agricultural Bank to support farmers in Jafara rural community. Interviews with 26 farmers enabled the researcher to identify the main challenges facing farmers in agricultural sector and providing some solutions by respondents in terms of the current and potential role of the Agricultural Bank in helping to address challenges facing farmers in the Jafara region and other rural area of Libya.

Table 1: Features of respondents

Selected region	**Respondents by sub-region**				**Total of Questionnaire respondents**		**Percentages %**	
Qasr Bin Ghashir	Airport	Espiaha and Souq Al Khamis	Al-Mraziq and AL-Saaiyh	Souq Al-Sabet	Survey	Interviews		
Survey	8	7	8	5	28		33.7	
Interviews	4	2	2	2		10		38.5
Al –Azizia	Azizia	Al-Ameriya	Al-Saadiya	Al-Swani				
Survey	6	2	2	10	20		24.1	
Interviews	1	0	1	3		5		19.2
Al-Zahra	Zahra	Al-Nasriya	Al-Mamoura	Al-Miya				
Survey	6	1	3	6	16		19.3	
Interviews	1	1	-	2	4	4		15.3
Janzour	Janzour and Anjila	Al-Krimia	Al-Hashan	Siyaad				
Survey	6	5	4	4	19		22.9	
Interviews	3	2	2	0		7		27
Total					**83**	**26**	**100%**	

2.1. Data collection and analysis:

The survey and interview techniques in the perspective of mixed method approach and its useful to answer the why, which and how types of research (Aslam et al., 2018; Muqadas et al., 2017). The questionnaire is being used to identify the most important issues and factors of sustainable agricultural development in the region but the questionnaire data is limit to answer what and which kind of the issues exists? Therefore, semi structured interviews are being conducted to explore why these issues exist and these issues could be solved. Therefore, the present study has adopted a mixed method approach with the purpose to increase credibility, transferability, confirm ability, and generalizability. The survey and interviews were carried out with farmers throughout the main four areas of the Jafara region (i.e. AL-Azizia, Qasr Bin Ghashir, Janzour, and Al-Zahra) in Libya. In addition, the research questions were designed after reviewing the literature on the subject of the study (Muqadas, Rehman, Aslam, and Ur-Rahman, 2017). The statistical tests have been used to address the aim of the study to purify the major issues of agriculture sustainable development in the Jafara region of Libya.

3. Libyan case study:

Libya is a developing country located next to the Mediterranean Sea in the North of Africa; its neighbouring countries in the west are Tunisia and Algeria, while Egypt is located to the east and the Sudan, Chad, and Niger to the North. (See figure 1). Furthermore, the coastal plains are located on the northern Mediterranean coast that includes the Jabal-al-Akhdar in the east and the Jabal-Nafusah in the west. According to FAO of the United Nations report in 2016, the population of Libya was around 6.3 million in 2015 with more than 20% of these living in rural areas. Approximately 85% of the population is living in or around Libya's two biggest cities (i.e. Tripoli and Benghazi), while remaining population is scattered in central and southern Libya (FAO, 2011). Libya has a total area of around 1.76 million km² but productive land only coversapproximately2% with the most productive land located in the Jebel Akhdar as well as in the Jafara region. While approximately 40%of Libya's farmers work full time and 90% of the farms in Libya are less than 20 ha and about 1 % more than 100 ha. According to Allafi (2014), the proposed objective of the Gadaffi government was to reposition the country in a post-oil economy hence the increased government spending in improving agricultural sector.

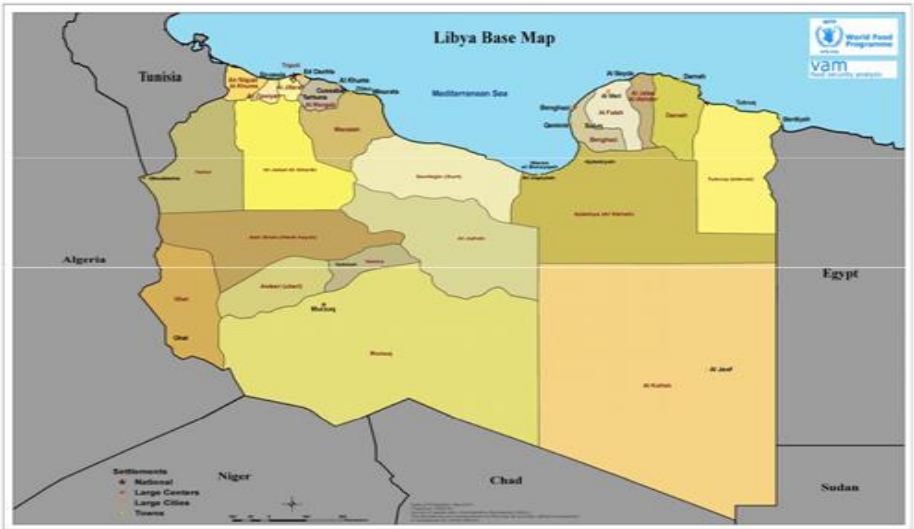

Figure 1: Location of Libya

This study is focused on cased study in Libyan context because case study approach helps to determined how political, social, cultural, motivational, technological, government, financial, and environmental challenges influenced the agriculture sector in the Libyan context. Under the Gadaffi leadership in Libya, the country witnessed different developments in urban and rural areas such as building infrastructure, banks, schools, health facilities and increased agricultural activities (Aridah, 2016; Allafi, 2014; Abuarosha, 2013). In the Jafara region, the government had invested for the purpose of improving socio-economic development (Allan et al., 2015). Additionally, the Gadaffi government was also directed at reducing importation of food and agricultural products by 2030 in Libya. Although Libya has extensive oil reserves, but political and violent conflict have negatively influenced the agriculture sector and its trade activities (Park & Carolina, 2016; Aridah, 2016; Abuarosha, 2013). It has been found that the level of food import increased within and after civil war (Falola & Achberger, 2013).

3.1. Libya background to the agricultural sector and agricultural production:

Libya was among Africa's richest countries before the civil war and is one of the few oil producing countries in the under developed continent (Aridah, 2016; Abuarosha, 2013). Although the agricultural sector is one of the main sectors in Libya but land cultivation has decreased due to low level support of Libyan government in civil war as well as closure of local markets for agriculture production trade (Park & Carolina, 2016; Abuarosha, 2013; Kumati, 2008). Many Libyan governments have initiated programs aimed at enhancing agricultural production, improving living standards, building new infrastructure and improving socio-economic development for arid land through expansion of market opportunities (FAO, 2011). However, the Libyan political, civil war, financial, environmental and climate, technological and the Agricultural Bank challenges are negatively influenced the agriculture production among rural areas in Libya (Park & Carolina, 2016; Aridah, 2016; Allafi, 2014). For example, the operational and financial capacity of the Agricultural Bank could not successful to offer agriculture credit to farmers in rural areas in Libya.

Some of the rural areas in Libya is dependent on rainfed agriculture but due to climate change and global warming the agriculture production from rainfed agriculture has been decreased in rural areas. The one of the main reasons of dependence on rainfed agriculture is that farmers have not enough financial resources to purchase agriculture inputs and cultivate their lands. While the agricultural sector is the main source of income among most rural areas of North Africa but it has been documented that agricultural employment opportunities have decreased in those areas due to global warming and climate changes (Hove et al., 2013; Tacoli et al., 2015; UNECA, 2009).Consequently, agricultural productivity is low and people may be trapped into food insecurity and poverty for decades among the African countries (UNECA, 2009).Furthermore, this UNECA report is also indicated that due to lower level of agricultural production, farmers are not motivated to take deep interest in cultivation of fields because their profit margin is very low.

3.2. Jafara background, agricultural sector and the issues facing farmers:

The Jafara region is situated between 10 - 50 km to the south-west of Tripoli city. A previous study has highlighted that Jafara region is covered an area of approximately 1940 kilometers ("Jafara District"). The capital city of the Jafara is Aziziya whereas Jabal-al-Gharbi is situated in the south, Tarhuna in the east, and Zawiya in the west (See the figure 2). The Jafara region is one of the main areas of irrigated agriculture in Libya producing olives, oranges, watermelon, dates and vegetables such as potato, onion and livestock products. It has access to the largest three markets in the West of Libya (i.e. Qasr Bin Ghashir, Al-Sawani Al-Krimieh and Al-Zahra) which sell both local and imported agricultural products. However, many farming families in the area are still unable to cultivate their land and gain enough income from their food.

Since 2011, the region has been hit hard by the civil war in Libya resulting from the Arab Spring revolutions. This has caused widespread destruction of infrastructure and affected the agricultural production as well as the income level of rural households with many families being displaced from the region. There are many challenges that are facing by the farmers in the region such as lack of ground water for fields, agriculture credit on high interest rates in private market, low level of trade activities in local markets due to violent conflict, and lack of agriculture technologies such as tractor other advanced technologies. In this paper with the farmers survey and interviews find out the main challenges facing farmers that were (1) water facilities (2) Financial support that will explain widely in the next section.

Figure 2: Location of Jafara region

4. Results and analysis:

Present study summarized most serious agricultural challenges are a lack of financial support and lack of water supplies which negatively influenced the sustainable agriculture development in Libya. Will be discussed the main agriculture challenges in the next section.

4.1. Financial support:

A farmer from the Qasr Bin Ghashir zonehas stated about the role of the Agricultural Bank for agriculture credit:

I have applied for agricultural credit, but I could get the loan from the Agricultural Bank. The bank has said to me that the government has not enough fund and farmers were unable to return the previous loans due to civil war. I have frustrated and left this occupation. Now I am working as a driver in a freight car.

The basic objective of the Agricultural Bank is to provide lower interest-based loans for purchasing latest agricultural technology and upgrade the water resources. The table 2 indicated that how many farmers are applied for agriculture credit; how many farmers have received agriculture credit from the Agricultural Bank; how many loans applications are pending and rejected. For example, 25 respondents have told that they applied for agriculture credit in the Agricultural Bank in Jafara region. Out of 25 farmers, 6 farmers are successfully received the agriculture loan while 19 respondents have revealed that

their applications are rejected by the Agricultural Bank. Furthermore, they also revealed that their applications are complete and valid, but the bank has lower level of available funds. Findings revealed only 2.4-percent respondents agreed that they have trust in the process of granting agriculture loans. Finally, 12-percent of respondents have said that they avoided applying agriculture loan due to the high interest of the Agricultural Bank loans. Interviews reveal that the farmers are suffering due to lack of financial support and violent war in Jafara region. In addition, these respondents have recommended that the Agricultural Bank should expand the long-term loans as well as provision of agricultural loans periodically based on the lower level of interest so that they can achieve higher level of agricultural production. In interview session, these farmers reported that the small group of farmers who have personal relationship or reference were received loans from the bank and other state-owned institutions.

Table 2**:** Financial support:

Description	Qasr Bin Ghashir	Al-Azizia	Al-Zahra	Janzour	Total of participants & Percentage
Agricultural loans applied by the farmers	13 (15.6%)	4 (4.8%)	3 (3.6%)	5 (6.0%)	25 **(30.0%)**
Agricultural loans approved throughout the year	6 (7.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 4.8%
Agriculture loans rejected by the Agricultural Bank due to various risks involved	7 (8.4%)	4 (4.8%)	3 (3.6%)	5 (6.0%)	19 22.8%
Agricultural loan applications that are pending due to lower level of funds in the Agricultural Bank	12 (14.4%)	2 (2.4%)	3 (3.6%)	4 (4.8%)	21 25.2%
Trust showed by the farmers in the process of granting agricultural loans.	2 (2.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 2.4%
Farmers that avoided to apply due to bad reputation of the Agricultural Bank	4 (4.8%)	2 (2.4%)	2 (2.4%)	2 (2.4%)	10 12%

4.2. Water facilities:

Many respondents have given following point of view regarding water supplied for their agriculture land:

"We are worried because the level of water has been declined above 300 meters under the land surface". We have not enough financial support from the Agricultural Bank and the Libyan government. As a result, we are unable to produce the maximum agriculture production. (13 participants)

Three farmers have given following point of view

"We have submitted applications regarding the agricultural credit for water supplies. However, the Agricultural Bank did not respond on our submitted applications. As a result, our applications are pending from approximately two year''.

Most of the interviewees have highlighted that the level of the water is gradually declining from the level of 300 meters under the agricultural land. 44.6-percent of participants have stated that they are suffering from water issues in region. Furthermore, this arid land requires a higher level of cost for pipes and drillings to access the ground water. On the other hand, 19.2-percent of respondents have left agriculture sector due to insufficient irrigation such as canal and rainfall. Only 3 respondents have believed that

canal system is producing enough quantity of water in the region. Finally, 2.4-percent of respondents stated that the Libyan government has supported for water supplies.

Table 3: Water facilities

Descriptions	Qasr Bin Ghashir	Al-Azizia	Al-Zahra	Janzour	Total of participants & Percentage
Farmers who were suffering from water issues	12 (14.4%)	14 (17%)	7 (8.4%)	4 (4.8%)	37 **(44.6%)**
Farmers who have left cultivation due to insufficient water resources (i.e. canal and rainfall).	6 (7.2%)	4 (4.8%)	3 (3.6%)	3 (3.6%)	16 (19.2%)
Farmers who are unable to received license for the drilling of new water boreholes	5 (6%)	3 (4.8%)	1 (0.0%)	1 (1.2%)	10 (12%)
Numbers and percentages of those farmers who have used modern technologies for water drilling	4 (4.8%)	3 (3.6%)	1 (1.2%)	1 (1.2%)	9 (10.8%)
Farmers who did not receive agriculture credit for water resources from the Agricultural Bank.	3 (3.6%)	1 (1.2%)	1 (1.2%)	1 (1.2%)	7 (8.4%)
Farmers who arranged supply of high-quality water pumps	3 (3.6%)	0 0.0%	2 (2.4%)	1 (1.2%)	6 (7.2%)
Farmers who attempted for reforestation and protection of forests	3 (3.6%)	1 (1.2%)	1 (1.2%)	0 0.0%	5 (6%)
Farmers who believed that their canal system is producing enough quantity of water	(1.2%)	1 (1.2%)	1 (1.2)%	0 0.0%	3 (3.6%)
Level of Libyan support to enhancing water supplies for agricultural land	0 0.0%	2 (2.4%)	0 0.0%	0 0.0%	2 (2.4%)

4.3 The role of the Agricultural Bank:

In this study, the focus was on the opinions of farmers to understand the role of the Agricultural Bank in supporting agricultural development in the region. The result indicated that the Bank provided various agricultural loans (long-, medium-, and short-term) to farmers with financial benefits and the benefits were not interesting for the majority of farmers. These loans were in services shape to support the prices of some agricultural tools and supplies subsidising livestock feed prices as well as prices to support submersible water pumps, etc. The Majority of farmers referred that the loans provided by the bank were not sufficient for support farmers and SAD and that the bank was failed to support farming communities in the region. However, farmers have suffered further agricultural challenges in the region. As a result of the agricultural challenges facing farmers in the region, the bank stopped granting loans after the "Arab Spring" in 2011, as a result of the financial crisis and fragile political situation of the Libyan government. However, political stability and the economic growth of the state should help the Agricultural Bank in this regard. However, the majority of respondents stated that the potential role of the Agricultural Bank

is to work with stakeholders and the Libyan government to amend agricultural and banking plans and policies with more effectively support by expanding the disbursement of agricultural loans and grants and reactivating agricultural cooperatives to support sustainable agricultural development in the region and rural areas of Libya.

5. Discussion and conclusion:

Previous literature shows that agriculture is the main activity for rural communities (Tacoli et al., 2015; Hove et al., 2013). The study is focused on sustainable agricultural development in rural areas in the context of a developing country'. Furthermore, the Jafara region of Libya is one of those zones where the farmers are facing agricultural sustainability challenges. By analyzing these challenges, policymakers and others from the Ministry of Agriculture and the Agricultural Bank can maximize the level of agricultural support to reduce the level of poverty among farmers. Findings reveal that agricultural productivity and income level have declined and poverty increased due to lack of financial resources as well as enough water unavailability in the region. Agriculture loan is a main financial resource to purchase tractors, water pumps, agricultural seeds, fertilizer and uninterrupted electricity system, construction of water facilitator (i.e. Tube-well and canals system). Respondents reveal that the Agricultural Bank has not financial resources because it is government-owned bank and the Libyan government has a lack of financial resources due to the violent conflict. Findings have revealed that the Agricultural Bank has failed to play its role and farmers are unsatisfied the way Libyan Agricultural Bank is performing its functions for long-term sustainability of the agriculture sector. Furthermore, it has been found that the Bank is unable to provide low interest rate loans for purchasing equipment and other agricultural technologies. Ineffective role of Agricultural Bank and political instability are the major reasons that negatively influence the administrative role of the Bank for enhancing support to sustainable development goals (Abuarosha, 2013; Allafi, 2014; Aridah).

Furthermore, these studies have also confirmed that improper irrigation arrangements, poor administration and role of the Agricultural Bank, lower level of adoption of agriculture equipment and delays in agricultural technology have decreased the level of productivity and sustainability in the context of Libya. This study concluded there are different types of funding that can be considered by the agricultural banking system. In this research, different capabilities that are lacking in the region have been discussed. The main challenges that are being faced by farmers are a lack of financial support and suffering in accessing water resources. Along with this, the farmers are not being given training or learning material for better management of crops. The infrastructure is another issue, which needs to be considered by the Agricultural Bank and Libya government. Also, through farmer interviews, it turns out that human capital has its own importance, which is being ignored by the Libya government. Therefore, human capital and different resource should be managed by the officials for better management of infrastructure for the agricultural sector in rural areas. Therefore, farmers are recommended that expand long-term agricultural loans without interest, microfinance initiatives for technologies & irrigation facilities and reactivating the role of the Agricultural cooperatives for up-gradation of an irrigation system can create significant transformation in agriculture sector in Libya. It is recommended that the Libyan government has to provide enough financial funds to the agriculture sector so that it can address the issues of agriculture credit and water availability, especially in the Jafara region.

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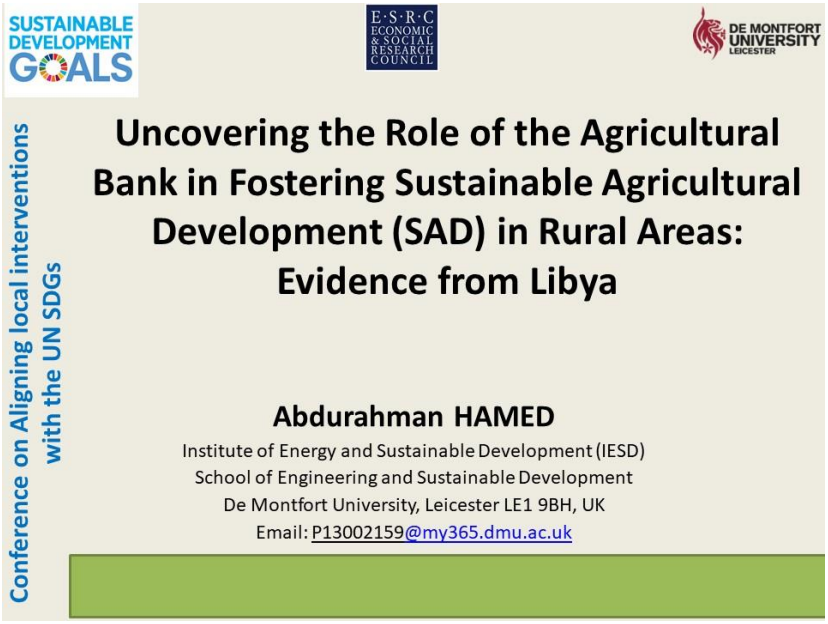

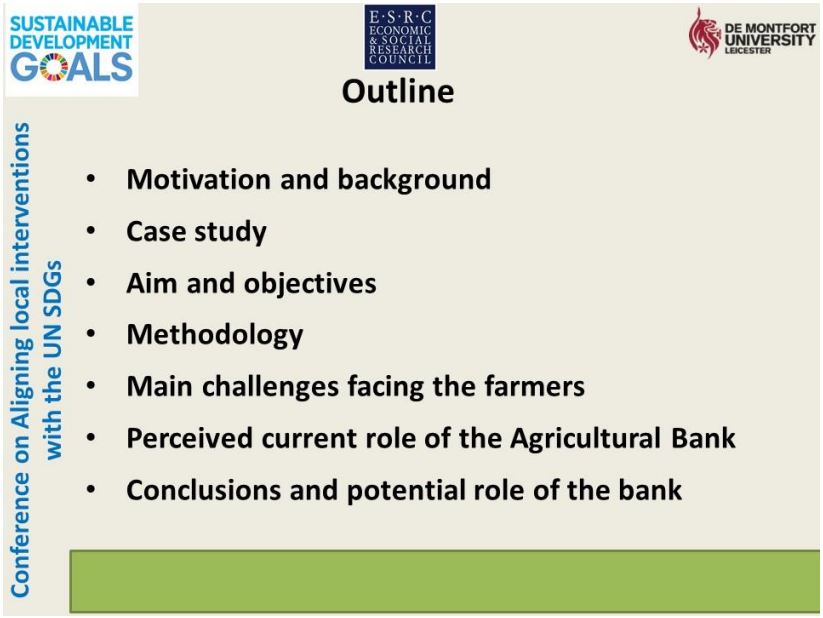

Motivation and background

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- SDG1, 2, 3 & 13 as the nucleus - direct or indirect contribution to the success of other SDGs.
- The main aim of SAD is to conserve natural resources and ensure socioeconomic growth the present generation without compromising the capabilities of future generations.

- North Africa – has significant challenges with most SDGs; Libya in particular.
- Political and economic instability affects SAD.
- Agricultural credit for farmers is an essential source of increased agricultural productivity.
- Specialist banks have an important role to play in supporting farming communities in developing countries - (The Agricultural Bank of Libya is one
- of these).

Case study

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- This Sustainable agricultural development (SAD) is relative to a new concept in Libya context.
- Libya is one of the developing countries located next to the Mediterranean Sea in the North of Africa.
- Libya has a total area of around 1.76 million km² but productive land only covers approximately 2% with the most productive land located in the Jebel Akhtar and the Jafara plain.
- Less than 40% of Libya's farmers work full time and 90% of the farms in Libya are small less than 20 ha.

Methodology

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- A mixed method design strategy is applied in this research with quantitative and qualitative data collected.
- Fieldwork approach adopted in the Jafara region - pilot study, survey and interviews with farmers that explored

1. The current SAD situation and challenges facing the sector in the Jafara region
2. The potential role for the Agricultural Bank in supporting farming address these challenges.

Sub-Regions of Jafara	Farmers survey	Farmers interviews
Al-Azizia	20	7
Qasr Bin Ghashir	28	10
Al-Zahra	16	4
Janzour	19	4
Total	83	26

- SPSS was used for data analysis of the survey alongside a thematic analysis of the interviews

Aim and objectives

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- **Aim – to explore how the Agricultural Bank can better support the farming community (SAD) in the Jafara region**
- Objectives:
- To examine the current state of (SAD) in the Jafara region of Libya.
- To identify the main challenges being faced by farmers in the region.
- To explore the current role of the Agricultural Bank in Jafara

Case study (contdd)

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- The Jafara region is one of the]most important agricultural areas in Libya and one that has the most irrigation.
- It is located to the south-west of Tripoli city.
- The study will identify SAD challenges.
- And the potential role of the Agricultural Bank in addressing these challenges.

Main challenges facing the farmers

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- Water availability and quality
- Funding for technology
- Political situation
- Infrastructure
- Workforce expertise
- Size of farms


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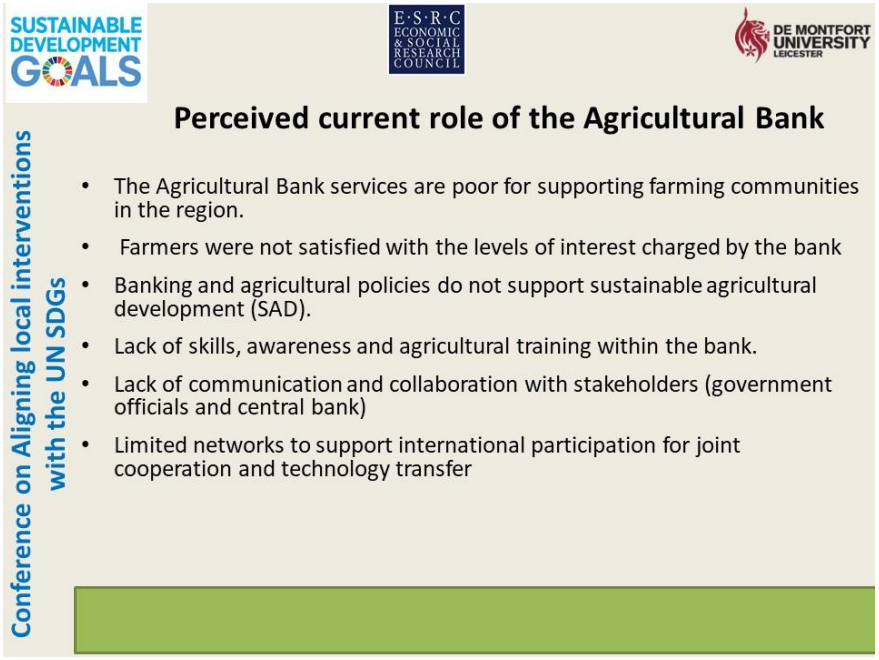
Potential role of the bank in addressing the challenges
There is a need for the Agricultural Bank to play a more effective role in addressing the identified challenges and support sustainable agricultural development.
Need to understand the concept of SAD more widely
Training support
Micro-finance
Low – zero interest loans
Supporting cooperative ventures and collaboration
Banking and agricultural policies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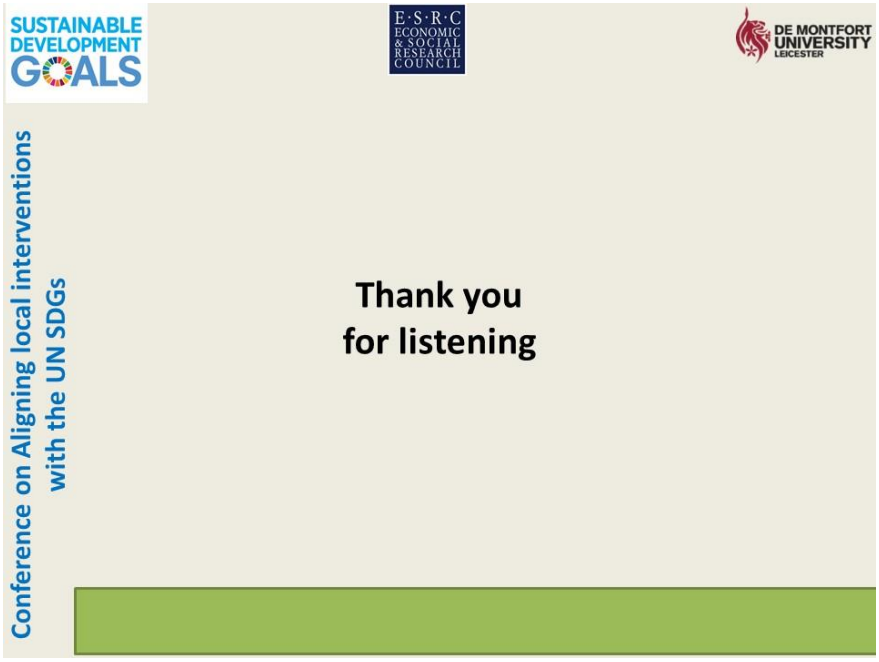
Perceived current role of the Agricultural Bank
The Agricultural Bank services are poor for supporting farming communities in the region.
Farmers were not satisfied with the levels of interest charged by the bank
Banking and agricultural policies do not support sustainable agricultural development (SAD).
Lack of skills, awareness and agricultural training within the bank.
Lack of communication and collaboration with stakeholders (government officials and central bank)
Limited networks to support international participation for joint cooperation and technology transfer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Thank you
for listening