

An Exploration of the Informal Credit Practices for Agriculture in Afghanistan: Reasons for Availing Informal and not Availing Formal Credit

Moahid MASAOOD

Graduate Student

Graduate School for International Development and Cooperation

Hiroshima University

1-5-1 Kagamiyama, Higashi-Hiroshima 739-8529, Japan

Keshav Lall MAHARJAN

Professor

Graduate School for International Development and Cooperation

Hiroshima University

1-5-1 Kagamiyama, Higashi-Hiroshima 739-8529, Japan

Abstract

Access to finance is a prerequisite for agriculture development. However, the coverage of formal credit to agriculture is shallow in Afghanistan. Most of the cash-starved farmers rely on informal credit sources for obtaining inputs and consumption smoothening. This paper aims to explore and assess the various types of informal credit for agriculture in Afghanistan, the reasons for availing informal and not availing formal credit, and the challenges faced in the acquisition of informal credit. Data has been collected from a sample of 99 informal credit users from Behsood, Balkh, and Paghman districts in Afghanistan. Descriptive statistics were used for summarizing and comparison. To assess the reasons for availing informal credit and not availing formal credit, the Garrett ranking technique was worked out. The results revealed that the informal credit has two features, the cost-free credit, which was availed based on relations and mutual help, called Qarzi Hassana, and the credit in which the lenders sought profit, which had four types, Peshaki, Musawamah credit, Grawee, and Sudh. Easy availability was the main reason for availing informal credit. The religious constraints and lack of information were the main reasons for not availing formal credit. Furthermore, the limited amount of cash and short repayment period were the main problems in informal credit acquisition. Moreover, the farmers sensed dependency and inferiority for being informal credit users. There is a need for increasing financial awareness. Peshaki and Musawamah credit should be controlled and should be included as a financial product by the formal financial institutions. Furthermore, credit should be extended to the farmers in a sufficient amount and for a convenient repayment period.

Keywords and terms: informal credit; formal credit; reasons; Interest.

1. Introduction

Agriculture has a vital role in the economies of many developing countries. Although the agriculture sector is underdeveloped in Afghanistan, it is regarded as the backbone of the country's economy. To develop agriculture, an additional source of finance outside of agriculture is required. Since 2002, Afghanistan has been seeking to expand access to financial services to foster economic growth and create secure livelihoods in its urban and rural areas. Since then, the agricultural strategies and plans include agricultural credit as the main driver and enabler of agriculture sector development (MAIL, 2016). However, strategies and plans are barely implemented. Afghanistan is yet to find ways to address the problem of lack of capital for its agriculture sector.

Farmers in Afghanistan take credit not only for their household consumption but also to purchase agricultural inputs and equipment. They also need it to market their produce. Farmers avail credit mainly because of the time lag between applying inputs and getting their harvest marketed.

There are two important sources of agricultural credit in Afghanistan, formal and informal. Formal credit sources are the state-recognized financial organizations or institutions which provide credit to the farmers. They are the commercial and

government banks, NGOs, and credit cooperatives. However, their activities are minimal in Afghanistan. On the other hand, informal credit in the country is the loan usually between individuals who know each other. They enter into a loan contract, which may be based on a verbal agreement or written documents which are not recognized by any state authorized bodies. The creditors are usually wealthy people, and the borrowers are poor who need supplies.

In most developing countries, formal credit institutions have been unable to meet sufficiently the demand for agricultural credit (Manig, 1999). According to Guirkinger (2008), in developing countries, the informal credit market constitutes the first feature of the rural credit market, which has drawn unremitting attentiveness in development economics. In Afghanistan, access to formal credit is deficient; Hussain (2009) reported that formal credit reached to only 8% of the total household in Afghanistan, of which only 20% was supplied for agricultural and livestock purposes. If the supply of formal credit is not sufficient, the informal credit market instinctively comes into the ground (Chaudhuri and Gupta, 1996). Nevertheless, the low coverage of formal credit is not only due to the insufficient government and donors' credit initiatives, but there are also some problems on the farmers' side. For example, farmers' low literacy and meager resource endowment, which make them unable to fulfill the criteria of availing formal credit. Therefore, informal credit sources have remained the primary option for poor farmers in Afghanistan.

Informal credit has gradually decreased in most countries throughout the decades in the past. For example, as per Pradhan (2013), the share of informal credit in the total debts decreased by 29.9% between 1971 and 2002 in India. However, a decrease in informal credit practices in Afghanistan doesn't seem to have the same pace as in other countries, except a decrease in usury practices, which may also be equivoiced by other sources of informal credit. The main reason for this could be the absence of formal credit between 1980 and 2001. Owing to the conflicts and civil war, that is the gap era in formal credit provision in Afghanistan. There is no exact data on the share of informal credit in total debts or on the number of households who availed informal credit in the pre-gap era in Afghanistan. However, the leading formal credit-providing institutions at that time, the Agricultural and Cottage Industries Bank and the Agricultural Development Bank, covered only 3% of the total households, which is very low (ACIB report, 1971 cited by Norvell, 1972). Norvell (1972) also stated that informal credit was widespread among the farmers in Afghanistan. Senzai and Harlan (1963) reported 45 percent of indebtedness among farmers in Nangarhar province, one of the main agricultural provinces at that time, located in the eastern part of Afghanistan. Hence, reasoning from this fact, we can conclude that informal credit was widespread in the pre-gap era. On the other side, the studies in the post-gap era also show informal credit as the extensively prevalent source of credit in the country. As per NRVA (2005), 38 % of the households have taken a loan from informal credit sources in Afghanistan. Additionally, informal loans were more commonly taken on by rural (42%) than by urban (25%) households. Floortje (2007) documented that informal credit is a significant source of access to capital, which assists households to deal with unpredicted occurrences or opportunities in Afghanistan.

There is very little understanding of the working of informal credit for agriculture in Afghanistan. The extant literature is not focused on agriculture. It accentuates the importance of informal credit in the livelihoods. It also discusses how informal and formal credit systems inter-link. For instance, Kantor and Andersen (2007) assess informal credit and livelihood. They found that informal credit helps in consumption smoothening. They also reported that the main reason for not availing formal credit was the interest (usury), which is forbidden in Islam. Klijn (2006) shown that informal credit supports in everyday life as well as in calamities. He also states that the limited cash available to the borrowers was the main problem in informal credit. Floortje and Pain (2007) reported that informal credit practices in Afghanistan are wide-ranging and usually interest-free. He found that offering help to poor people was the main reason for the provision of informal credit in rural areas. All these are anthropological studies which are not specifically fixated to farming.

The knowledge on informal credit is largely influenced by the researches carried out on informal credit in the Indian sub-continent (Mohieldin and Wright, 1994). Therefore, considering the difference in the socio-cultural and economic contexts between Afghanistan and other countries, the implication of the findings of the existing studies to the context of Afghanistan may give an inaccurate view of the informal credit.

Moreover, there is controversy about the role of informal credit in the current literature. Some studies show that informal credit is exploitative and harmful for economic development, while others confirm its decisive role in the development. For example, Amjad and Hasnu (2007) confirm the importance of informal credit, especially for smallholders. Informal credit helped farmers to realize higher income in Nigeria (Yusuf et al., 2015). Informal credit leads small farmers to the risk of falling into a vicious cycle of perennial indebtedness in India (Rajeev and Deb, 1998). Informal credit causes dependency and the feeling of inferiority among farmers in Pakistan (Manig, 1999). These controversies further exacerbate the problem of the generalization of the findings of the extant studies on informal credit to Afghanistan.

Therefore, to remedy the above mentioned inadequacies, and taking into account that the primary source of credit for agricultural in Afghanistan is the informal, this study takes a concise look into the various types, utilization, reasons for participating in informal credit, not participating in formal credit, and the challenges faced in the acquisition of informal credit for

agriculture in Afghanistan. The specific objectives are as follow:

- To explore the various sources of informal credit to farmers in the study area.
- To examine farmers’ reasons for availing informal credit and not participating in formal credit.
- To assess the various challenges experienced by the farmers in using informal credit.

2. Methodology

2.1 Sampling

The primary data used in this study was collected through the use of a semi-structured questionnaire administered to the informal credit-user farmers in the three districts located in the three different regions of Afghanistan. The three districts were purposefully selected based on the concentration of farming activities and access to formal and informal credit. The districts are Behsood, Paghman, and Balkh, with the estimated rural population 126,262, 111,638, and 124,508, respectively (CSO, 2018). Behsood district is located in Nangarhar province, Paghman district is in Kabul province, and Balkh district is located in the Balkh province¹. The random technique was employed in all the three districts to select a total of 99 farmers who availed informal credit mainly for their agricultural activities from July 2017 to August 2018. Figure 1 shows the study area.

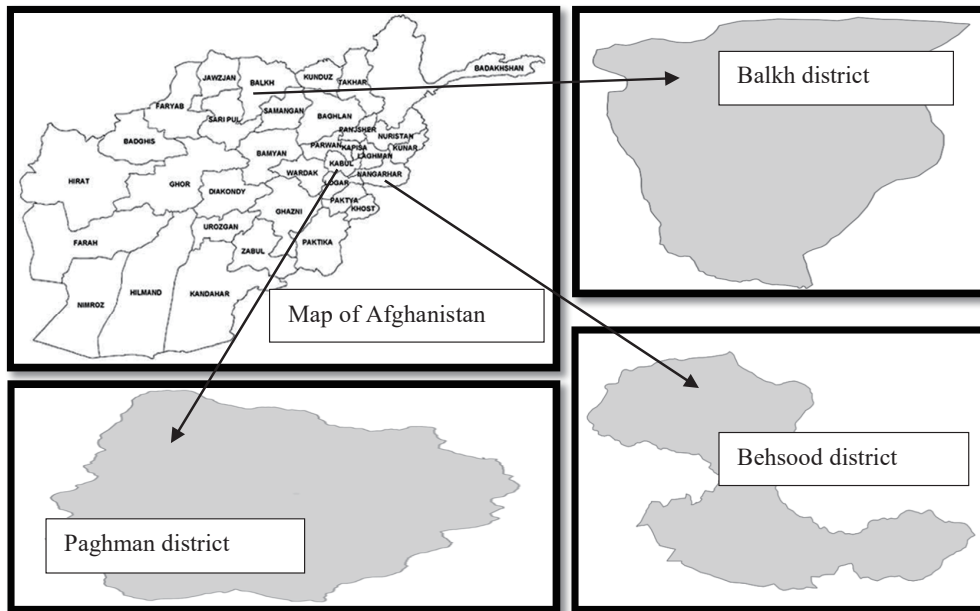


Figure 1. Study area
Source: (Afghan Web, n.d.)

2.2 Analytical methods

Descriptive statistics such as frequencies, means, percentage, and tabulation were used for summarizing and comparison of the data.

2.2.1 Calculation of the annual interest rate

In the Peshaki, Sudh, Grawee, and Musawamah credit, which are discussed in detail in the results and discussion parts, the lenders sought to profit. However, the profit doesn’t resemble the conventional interest rate charged by the banks. To convert it to the annual interest rate, below mentioned formulae were used.

i. Peshaki

To calculate the interest rate for the Peshaki contracts, the contract price of the commodity pledged by the farmers and the harvest price were considered. The harvest price is the market price that prevails at the time of harvest. Therefore, similar to Saleem (1987), the periodic rate of return on Peshaki credit (r) is calculated using the following formula:

$$r = [(P_h - P_c) / P_c] * 100 \dots\dots\dots (1)$$

r = interest rate, P_h = harvest price, P_c = contract price,

ii. Musawamah credit

For calculating interest rate from the credit availed from the input suppliers, sale prices, and the market prices of the same inputs were taken into account. The following formula was used:

$$r = [(P_s - P_m)/P_m] * 100 \dots\dots\dots (2)$$

P_s = price in which the inputs are sold in credit to the farmers, P_m = market price of the same inputs, r = interest rate

iii. Sudh

The interest rate on Sudh credit was calculated using the below formula:

$$r = [(A_p - A_l)/A_l] * 100 \dots\dots\dots (3)$$

A_p = amount paid to the moneylender, A_l = amount lent from the moneylender, r = interest rate

The interest rates of the above three types of informal credit were converted to the annual interest rate (ra) using the following formula:

$$\text{Annual interest rate: } ra = r * 12/n \dots\dots\dots (4)$$

ra = annual interest rate, n = number of months

iv. Grawee

To calculate the interest rate for Grawee credit, the rental value of the properties which were leased-out for the credit were taken as the interest rate as follow:

$$ra = \frac{\text{Annual rental value of the property leased out}}{\text{Amount received by the farmer}} * 100 \dots\dots\dots (5)$$

2.2.2 Analyzing reasons

Garrett Ranking Technique was used to analyze and prioritize farmers’ reasons for availing informal credit, and not availing formal credit. Several researchers have used this method to analyze and prioritize respondents’ reasons. For example, Asante-Addo et al. (2017) used it to analyze farmers’ reasons for participation and non-participation in formal credit programs in Ghana. Anjugam and Ramasamy (2007) used the Garrett Ranking Technique to analyze the reasons why members join self-help groups.

Two lists of reasons, one for availing informal credit and another for not availing formal credit, were decided based on the case study done before conducting the survey. The farmers were asked to weigh each reason (assign a rank) in a particular list of reasons during the survey. By using Garrett Ranking Technique, the order of the weights given by the respondents was changed into percentage position using the following formula:

$$\sum_{j=1}^n [(R_{ij} - 0.5)/N_j] * 100 \dots\dots\dots (6)$$

R_{ij} = rank given for the i^{th} item by the j^{th} individual

N_j = number of items ranked by the j^{th} individual.

The percentage position of each weigh was converted into scores using the Garrett ranking table (Garret and Woodworth, 1969). For each reason provided, scores of individual respondents were added together and divided by the total number of respondents to provide a mean score. Finally, the mean scores for all the reasons were arranged in descending order, and the reasons were ranked based on the magnitude of the mean scores.

3. Results and Discussion

3.1 Types of informal credit

Informal credit was found with two main features, five types, and various sources. Credit extended for profit, which can be exploitative, and the credit given to farmers based on social relations or mutual trust and cooperation were the two main features of informal credit in the study area. The five types were Qarzi Hassana, Peshaki, Grawee, Musawamah credit, and Sudh. Among the types of credit, only Sudh was considered as un-Islamic opposing to the Islamic doctrines of finance. The various sources of informal credit found in the study area were input suppliers, neighbors, relatives, money lenders, property mortgagees, and wealthy villagers. Traders, input suppliers, money lenders, property mortgagees, and some friends and neighbors extended loans to the farmers based on the expectation of getting some profit. The profit may or may not bear a resemblance to the conventional interest

rate. Figure 2 shows the features of informal credit for agriculture in Afghanistan.

The five types of informal loans are discussed as follow:

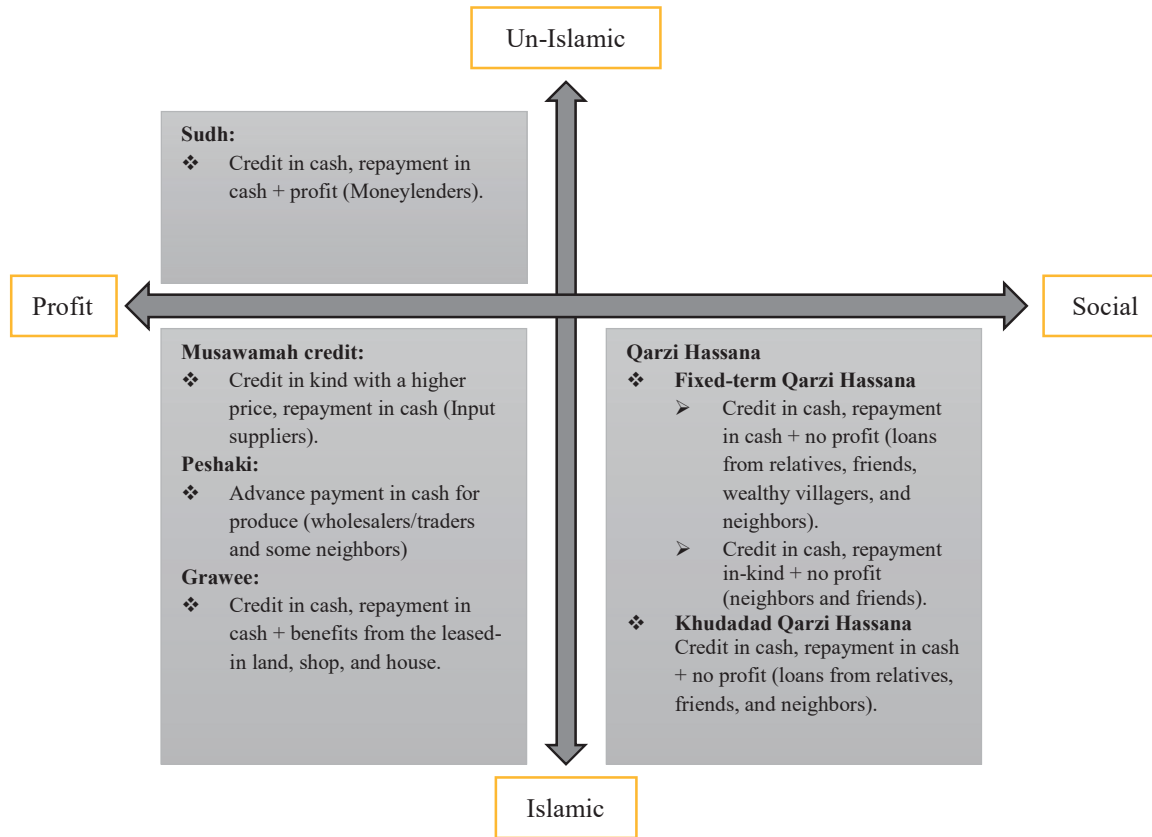


Figure 2. The features of informal agricultural credit in Afghanistan
Source: Adopted and modified from Klijin (2006)

i. Qarzi Hassana

Qarzi Hassana, or in Arabic language Qardhul Hassan, refers to the loans which are not only free from interest (usury) but any benefit or return (Bhuiyan et al., 2012). Obaidullah and Khan (2010) refer Qarzi Hassana as free of cost credit well-regarded by Islam to make it available to the needy people. Qarzi Hassana was of two types in the study area, fixed term Qarzi Hassana and Khudadad. Fixed-term Qarzi Hassana is usually provided for a shorter period. However, Khudadad credit is with an unspecified repayment period. The local term Khudadad is composed of two words, Khuda, which means god and Dad means to give. Thus, in this type of credit, the debtor is allowed to repay the credit whenever the god enables him (whenever he finds the money). In Qarzi Hassana, the farmers were lent based on mutual cooperation, in which lending and borrowing relations are a part of a broad social system of interactions.

Qarzi Hassana is also provided through some Islamic banks, in which Islamic banks are allowed to charge borrowers only a service fee to cover the administrative expenses of managing the loan.

ii. Musawamah credit

In Islamic finance, Musawamah (also called Elmusawamah) is a sale in which a seller is not compelled to reveal to a buyer the purchase price of a specific commodity paid by him (Ashraf et al., n.d.). However, in Musawamah, a buyer and a seller can bargain for the price of a particular commodity. Musawamah can be both in cash and in credit. Islamic banks use this type of financial product with a deferred payment sale (Paul and Osmond, 2016). When the sale is done with differed payment, it is called Musawamah credit, which is a common type of credit in Afghanistan.

This was the in-kind credit provided by the input suppliers in the study area. Input suppliers are the traders, importers, wholesalers, and retailers that exist in the agricultural inputs' markets of the main cities and the district markets of Afghanistan. They provide inputs such as fertilizer, seed, pesticides, equipment, and machinery in cash and credit to their customers. The inputs provided in credit (Musawamah credit) are usually at a higher price than the market price. The repayment is made by farmers mostly after the harvest of their crops. The farmers go for this type of credit at the time they are cashless and in need of applying

inputs. Most of the farmers in Afghanistan do not have a regular income and become seasonally short of cash. Input suppliers allow them to purchase their inputs and pay for them at a later date when they acquire cash. The repayment to input suppliers is usually done after harvest.

iii. Peshaki

Some local traders and wholesalers of agricultural produce extend credit to the farmers, and in return, they take their harvest, generally in lower than market price. This is known as Peshaki in local terms, which means advance payment. This type of credit was availed by farmers to meet their consumption needs and to purchase agricultural inputs in the lean period.

This type of credit is akin to the Islamic type of financial product, Salam. The Arabic word Salam means “to advance”. Under Salam contract, a borrower sells in advance a particular part of his future crop in exchange for a loan (Saqib, 2011). Adequate information about the debtor is essential, and therefore, there is no collateral required (Elhiraika, 1996). In this type of credit contract, creditors set prices that are usually considerably lower than the harvest prices. Although subject to negotiation, the lender has an upper hand in determining the amount of cash to be received by the borrower and the amount of future crop to be delivered. In this process, the present (contract) price of the future crop is specified. According to Saleem (1987), in Sudan, lenders enjoy monopoly power in Salam contracts. Moreover, in this type of contract, price fluctuation of the agricultural commodities can adversely affect farmers (Saiti et al., 2018).

Pain (2008) documents that some farmers in Afghanistan traditionally pledge their future harvested wheat and some horticultural crops for the advance of credit (Peshaki). He also states that most of the opium-based² credit is Peshaki. This type of contract provides support to the poor farmers in tough times in Afghanistan, but at a higher price and usually putting households dependent on local traders (UNODC, 2003). Peshaki is practiced for working capital and home consumptions by poor farmers in Afghanistan in which the producers receive only 60–70 percent of the final sale price (UNDCP, 1999).

iv. Grawee

Grawee is a mortgage loan in which the owner’s rights to use the property passes to the mortgagee, and in return, the mortgagee provides a certain amount of money to the owner. In this type of contract, lenders retain use of the borrowers’ immovable property until the loan is repaid. The owner of the property who needs money gives the property for a fixed amount of money paid by the mortgagee who becomes a tenant after the contract. The time is also usually fixed. The property is only and only returned to the owner after the lender’s money is repaid. Only those who own immovable properties can access this type of credit. The properties retained by the lenders in the survey were agricultural land, house, and shop. Grawee is used to access a large amount of credit or if a person is in a situation where there is no other sort of guarantee for a credit (Floortji and Pain, 2007). Grawee is also prevalent in the cities, which is a traditional and famous mode of credit for accessing housing. This type of contract also assists in offering opportunities for Afghans to save money and at the same time, not paying rents (MUDH, 2017).

Grawee is commonly taken for social events such as marriage and death ceremonies. However, for this study, only those Grawee have been considered in which the debtor availed loans for agricultural purposes, e.g., buying a tractor, construction of farmhouse, etc.

v. Sudh

Moneylenders Provide loans to the cash-starved farmers, usually with a very high interest rate. This type of credit is called Sudh in local terms. Sudh is not complying with the Islamic doctrines because it includes explicit interest or usury. Thus, it was considered un-Islamic. Moneylenders or the Sudh credit providers are called Sudh Khuran in local terms. They exist in clandestine in Afghanistan.

Norvell (1972) states that ACIB (Agriculture and Cottage Industries Bank) was established in 1955 to save farmers from the exploitative money lenders and land mortgagees. He has shown money lenders as one of the primary sources of credit in Afghanistan. Reasoning from this fact, it can be drawn that the number of money lenders was higher in the pre-gap era. However, it has been decreased the 1980s onwards as it is un-Islamic and owing to the Islamization in the country, it is more hated in the country than it was hated earlier to 1980. However, it still exists in secretly. Sudh is also hated in some other Islamic countries. For example, Manig (1999) states that full-time moneylenders are not too numerous (2.4% of all credits) in Pakistan, and just as their activities, they are socially despised.

3.2 Borrowing different types of informal credit and the average amount

Among the informal credit users, the percentage of borrowers who borrowed Qarzi Hassana credit was higher (42.42%), followed by Musawamah credit (23.23%). 11.11% of the informal credit users borrowed from wholesalers/traders as Peshaki credit. 7.07% of farmers went for Grawee credit. They give their properties to the mortgagees to access capital for their agricultural activities. The proportion of those who borrowed money as Sudh from money lenders was lower compared to the other sources (6.06%). 10.10% of farmers availed more than one informal credit, of which 6.06 % borrowed Musawamah credit and Qarzi

Hassana simultaneously. The number of those who, at the same time, availed both Qarzi Hassana and Grawee was 4.04%. Figure 3 shows the percentage of farmers obtained various types of informal credit.

The results showed that Qarzi Hassana was the most frequent credit type among farmers. It may be due to the easiness in its availability and the existence of too many sources for this type of credit. Moreover, this indicates that a strong network of social and economic interaction and personal relationship exist among the farmers in the rural areas of Afghanistan. However, the average amount borrowed as Qarzi Hassana was the lowest (22034.2 AFN). Thus, in Qarzi Hassana credit, being cost-free is an essential advantage for farmers, but the limited amount of cash may decrease its usefulness.

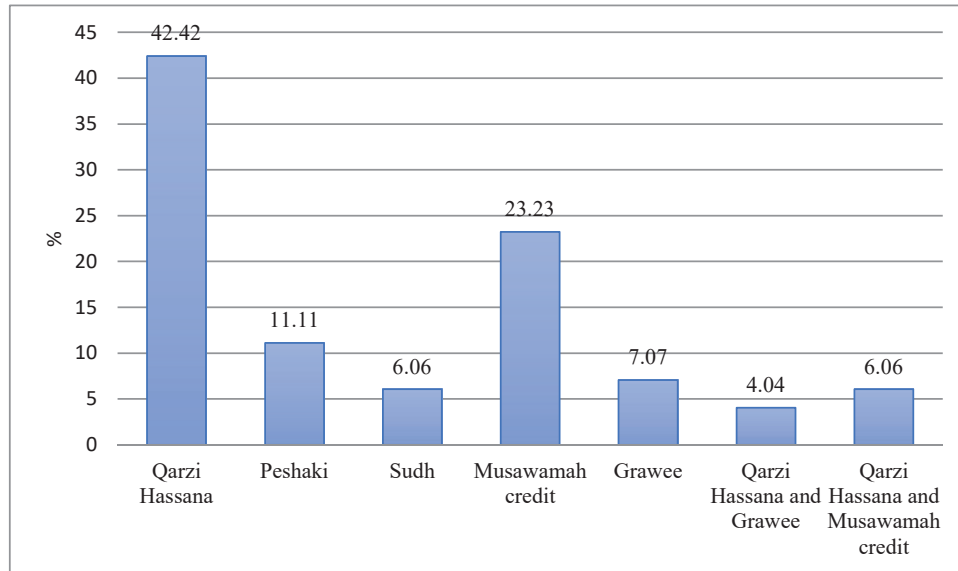


Figure 3. Percentage of farmers who availed different types of informal credit
Source: survey, 2018

The proportion of farmers who obtained Musawamah credit was the second highest, which demonstrates that input suppliers are also one of the primary sources of credit to the farming households. Input suppliers are the importers, wholesalers, and retailers in the cities and district towns of the country. Agriculture production depends on inputs such as fertilizer, pesticides, machinery, seed, etc. However, because of the time gap between the realization of income and the act of expenditure, poor farmers cannot afford to procure necessary inputs, which results underinvesting. According to Holle (2017), credit from input suppliers is one of the ways which can address this issue. The average amount borrowed as Musawamah credit was 22167 AFN. The average amount of credit borrowed as Grawee credit was higher (250714.3 AFN) than the other types of credit. This type of credit is availed to access a large amount of money to buy agricultural land, construct a farmhouse, buy a tractor, etc. However, few farmers (7.07%) availed Grawee credit as it is availed only by those who have immovable properties and need a large amount of money.

The average amount availed by those farmers who borrowed Qarzi Hassana and Grawee simultaneously was 252500 AFN. Those who at the same time, took Qarzi Hassana and Musawamah credit was 33916.7 AFN. The Qarzi Hassana credit availed along with Grawee, and Musawamah credit was the fixed term Qarzi Hassana. Grawee was mainly taken for fixed capital investment, such as buying a tractor, constructing a farmhouse. Thus, a farmer may fall in need of working capital even after taking Grawee credit. Therefore, the farmers went for Qarzi Hassana along with Grawee. Similarly, as discussed earlier, Musawamah credit is the credit provided in kind. Farmers availing both Musawamah and Qarzi Hassana may imply that the farmers needed cash to pay for costs other than the inputs that they have already borrowed. For example, the cost of human labour or household consumption. Figure 4 shows the average amount of credit obtained from the different types of credit.

Additionally, among the Qarzi Hassana borrowers, the number of those who were lent Khudadad credit was only 11, which makes 26.19% of all the Qarzi Hassana borrowers and 11.11% of all the informal credit users. Khudadad credit users are not compelled to repay in a particular period. They are allowed to pay whenever they find the money. This is an immense sort of help through lending. The primary source for this type of credit was relatives. Six out of 11 Khudadad credit users availed credit from their relatives. Relatives include those who have linear generational relationships, i.e., parents, grandparents, etc., collateral bonds such as siblings, cousins, nephews, uncles etc., and the in-laws. The rural people of Afghanistan live in a collectivistic culture which stresses on helping relatives in tough times (Attai, 1978). Four Khudadad credit users borrowed from their friends, and only one borrowed from his neighbor. The average amount availed as Khudadad credit was 16727.2 AFN, which is smaller than the

average of Qarzi Hassana credit (22034.2 AFN).

The availability and farmers' dependence on a range of informal credit types might be due to the absence of formal credit between 1980 and 2002. In that period, informal credit was the only source for farmers to purchase inputs or expand farm businesses, so they habituated to borrowing from informal sources. Though, after 2002, Formal credit through MFIs, credit unions, and commercial banks came into the ground, its coverage is low (Hussain, 2009).

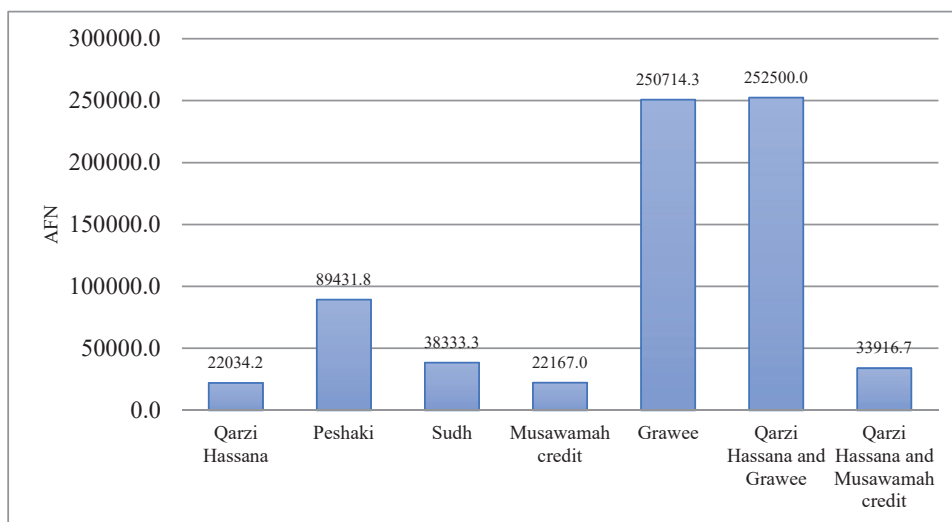


Figure 4. Average amount of credit of the different types of informal credit
Source: survey, 2018
 1 USD = 69 AFN

3.3 The interest rate

The interest rate is higher (44.16%) in the case of Peshaki, which is probably due to the upper hand, the traders and wholesalers have in the contract. Besides, the higher interest rate may also be due to the high price risk associated with agricultural produce. Traders and wholesalers of agricultural products are more experienced than the farmers in anticipating prices. The prices of agricultural produce, especially of horticultural commodities, are too volatile. Most of the Peshaki contracts in the study area were for fruits and vegetables. Therefore, at the time of the Peshaki contract, the traders and wholesalers put the higher price risk as a reason to have the product at a lower price.

The lowest estimated annual interest rate was in the case of Grawee (5.9% per year). However, only the rental value of the properties which were leased-out for the credit was considered as the interest rate for this type of credit. The lowermost annual interest rate for Grawee contract may also be since this is the most secured informal credit. The creditors can save money through this type of contract without worrying about any loss because they have the right to use a sort of property retained from the debtors who are the owners⁴. In those Grawee contracts which involve leasing out agricultural land for credit may cost more than the rental value of the land. The farmers may get more benefits through their agricultural activities on land than the rental value of the land. The calculated annual interest rates for Sudh and Musawamah credit were 36.67% and 31.3%, respectively. Figure 5 depicts the annual interest rate for the different types of informal credit.

3.4 Utilization of informal credit by farmers

Qarzi Hassana was used for numerous purposes. In the study, out of 42 farmers who availed Qarzi Hassana, 71.43% revealed that they utilized the credit to acquire inputs. 28.57 % of the farmers stated that besides using for agriculture purposes, they used it for household consumption. As Musawamah credit was the in-kind credit from input suppliers, the credit diversion didn't exist and was solely a credit for inputs acquisition. Grawee credit was utilized for a more substantial investment, such as the construction of farm building (42.86%)⁵. It was also used for purchasing tractor (28.57%), purchasing agricultural land (28.57%), and purchasing animals (28.57%). 83.33% Sudh credit users utilized the credit for household consumption, and 66.67% used it for agricultural inputs acquisition. All the farmers who availed Peshaki credit used it to procure inputs, and 90.91% of them utilized it for their household consumption. Like Qarzi Hassana, Peshaki credit had mixed uses and was utilized for too many purposes, as shown in Table 1. This shows that the Peshaki credit users' capacity to save and invest was low, and they become in need of money until the realization of income from their agricultural activities. Yusuf et al. (2015) also found that informal credit is obtained for both

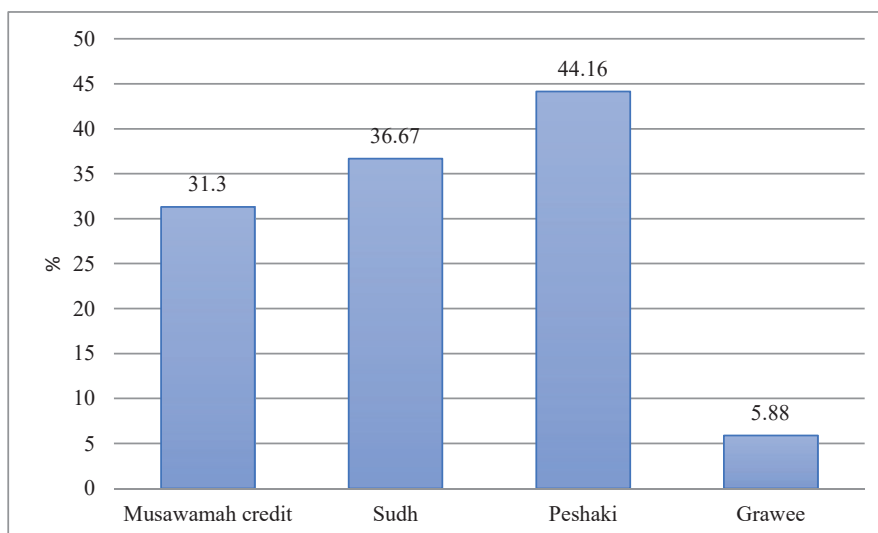


Figure 5. The calculated average annual interest rate for the different types of informal credit
Source: Survey 2018

agricultural production (productive investment) and household consumption.

Having access to credit helps farmers to procure necessary inputs, which are the main requirement for increasing production and hence, agricultural development. Thus, access to informal credit has enabled farmers to obtain inputs. This indicates that informal credit plays a vital role in farmers' productivity. Therefore, in the absence of formal credit in Afghanistan, informal credit is necessary to enable farmers to apply necessary inputs. It is worth noting that without Musawamah credit, the other types of informal credit which were availed for agricultural purposes were partly diverted to the purposes other than agriculture, e.g., household consumption. Table 1 shows the utilization of credit by informal credit users.

3.5 Farmers reasons for participating in informal credit

Table 2 reveals the respondents' reasons for obtaining informal credit. The three most important reasons revealed by informal credit users are the easy availability, needed credit to expand existing or undertake a new income-generating activity, and being interest (usury) free.

Easier access to informal credit was ranked higher. It is because informal credit does not require collateral and long formal procedure. In most of the informal credit contracts, only sufficient knowledge about the borrowers was enough for the creditor to lend the loan. This finding is similar to Singh et al. (2009), as he found that the most important reason which was ranked higher for obtaining informal credit by farmers was the easiness in access in Punjab state of India. Karaivanov and Kessler (2018) also found that access to informal credit is more comfortable than formal credit. Hence, the lower collateral in case of informal credit (with the possibility of zero collateral and zero interest rate) attracts borrowers. The availability of many types and various sources, and the easy access to informal credit signal competition of informal credit to the formal credit institutions. Kantor and Andersen (2007) suggest formal credit institutions in Afghanistan who are entering a new area, to recognize the range of credit products available as they would be entering a market with many possible credit products. Taylor (1983) states that informal credit is competitive and easily distributed because of the lower cost and the comparative advantage in obtaining information.

The second highest ranked reason was to expand existing or undertake a new farming activity. It shows that the farmers are willing to increase their production and income and will go for diversification if they find access to capital. Credit is highly demanded, mainly for the purchase of main agricultural inputs, including fertilizers, seeds, pesticides, and purchase of farm machinery.

Being interest (usury) free is the third-highest ranked reason to participate in informal credit. The credit obtained from relatives, friends, wealthy villagers, and neighbors as Qarzi Hassana was not only readily available to the farmers but was also free of any cost. Credit availed as Musawamah credit, Peshaki, and Grawee was with concealed interest believed by the farmers to be compliant with the Islamic doctrines.

3.6 Farmers' reasons for not availing formal credit

Table 3 reveals the reasons given by informal credit users for not participating in formal credit. Among the eight reasons, the

Table 1. Utilization of credit by different informal credit users*

Type of informal credit	Utilization of informal credit	No. of respondents	Percentage (%)
Qarzi Hassana (n=42)	Inputs acquisition**	30	71.43
	Purchasing animals	4	9.52
	Payment for labour	9	21.43
	Transportation	7	16.67
	Other marketing expenses	6	14.29
	Household consumption	12	28.57
	House construction or repairing	5	11.90
	Health care	5	11.90
Musawamah credit (n=23)	Inputs acquisition	23	100.00
Grawee (n=7)	Purchasing animals	2	28.57
	Purchasing tractor	2	28.57
	Purchasing agriculture land	2	28.57
	Construction of farm building	3	42.86
Sudh (n=6)	Inputs acquisition	4	66.67
	Purchasing animals	3	50.00
	Household consumption	5	83.33
	House construction or repairing	1	16.67
	Health care	2	33.33
Peshaki (n=11)	Inputs acquisition	11	100.00
	Purchasing animals	1	9.09
	Payment for labour	7	63.64
	Other marketing expenses	8	72.73
	Household consumption	10	90.91
	House construction or repairing	5	45.45
	Health care	4	36.36
Qarzi Hassana and Musawamah credit (n=6)	Inputs acquisition	4	100.00
	Payment for labour	1	16.67
	Transportation	2	33.33
	Other marketing expenses	1	16.67
	Household consumption	1	16.67
Grawee and Qarzi Hassana (n=4)	Inputs acquisition	3	75.00
	Payment for labour	2	50.00
	Purchasing agriculture land	2	50.00
	House construction or repairing	2	50.00

Source: Survey, 2018 *Multiple answers **Inputs were fertilizer, seed, pesticides, solar panels, water pumps, spray machines, etc.

Table 2. Reasons for participating in informal credit

No.	Reasons	Mean score	Rank
1	Easily available	58.33	1
2	Needed credit to expand existing or undertake a new farming activity (e.g., crop diversification) to support my family.	57.78	2
3	It was interest (usury) free	54.75	3
4	Reduce or pay back old debts	45.3	4
5	Increase income to save money	34.55	5

Source: Survey, 2018

two higher-ranked reasons were religious constraints and not having enough information on how to get formal credit.

Islam prohibits interest as a source of income or profit (Wajid and Kalim, 2009). In Quran, the holy book of Muslims, it mentioned that Allah has permitted trade but prohibited interest (Quran, 2:275). The religion of more than 99 percent of the population in Afghanistan is Islam. Due to this reason, interest-based finance decreases the satisfaction level of the farmers. Demiruge-Kunt et al. (2015) document that in Muslim majority countries, religious reasons affect the performance of financial services. Karlan et al. (2017) found that formal credit coverage is particularly low among the poor and low-income Muslims. Most farmers in Afghanistan are the low-income people, and probably this is the reason that they are diffident to avail interest-based formal credit.

After the onset of the new government in 2001 and the enacting of new banking law in 2003, many financial institutions were established. As per Hussain (2009), they were successful in reaching a large number of clients and in covering their operational costs. However, considering that the main reason found in this study for not participating in formal credit was the religious constraints, we can conclude that there are suspicion and mistrust for formal credit among the farmers. Although recently, some of the formal financial institutions started to offer Islamic financial products, probably the farmers are not aware of them, or there is still a mistrust among them about formal credit for being un-Islamic.

The second-highest ranked reason was the lack of information in participating in formal credit. There seems to be a lack of financial awareness. Many farmers were not adequately informed about the formal credit facilities. As per Santos et al. (2016), information asymmetry leads to relying on the informal credit market. Pischike et al. (1983) state that the informational advantage has assisted the informal credit sector to extend credit to those who are not covered by the formal financial sector. This also shows that the market for informal credit in agriculture is created not only because of the non-existence of formal agricultural credit programs and the low coverage of the existing financial institutions but also by the lack of financial awareness.

Table 3. Reasons provided by informal credit users for not availing formal credit

No.	Reasons	Mean score	Rank
1	Religious constraints	70.4	1
2	Do not have enough information on how to get a formal credit	68.8	2
3	Credit conditions unsuitable and/or too restrictive	60	3
4	Have no guarantor/collateral	51.2	4
5	The procedure is too complicated	48.8	5
6	High interest rate than that of informal credit	48.6	6
7	Don't like to be indebted to a bank or MFIs	41.2	7
8	Locations of the financial institutions are far	38	8

Source: Survey, 2018

3.7 Problems faced by farmers in availing informal credit

The farmers faced numerous problems in availing informal credit, as enumerated in Table 4. A limited amount of cash was a problem cited by 72.7% of the informal credit users. A short period of repayment for the credit was reported by about 59.6 % of the farmers. This is consistent with the findings of Muhiuddin and Wright (1994) who found that the amount lent through informal credit market was limited. Tang and Guo (2017) also reported that informal credit is inadequate in addressing rural credit needs in China.

Furthermore, 54.5% of the borrowers opined that they would be in tension until the loan is repaid, and 38.38% regarded taking informal credit as a shame. This shows that availing credit from the informal credit market usually causes personal dependence and even inferiority for the borrower. This is similar to the findings of Manig (1999), as he found that informal credit causes a sense of dependency. He also found that large farmers don't take informal credit to avoid inferiority in Pakistan. Table 4 reveals the problems cited by informal credit users.

Moreover, most of the informal credit users (86.9%) have cited a loss of credibility as the consequence of being a defaulter. (49.5%) of the farmers reported that being a defaulter in informal credit causes conflict. 26.2% of farmers stated that they would be compelled to sell their livestock. Accordingly, Informal credit users are less likely to default to avoid the mentioned social penalty they would receive. Table 5 depicts the fallouts stated by the informal credit users in the study area if the loan is not repaid on time.

Table 4. Problems opined by informal credit users*

No.	Problems	Frequency n= (99)	Percentage (%)
1	High interest rate	7	7.07
2	Compel to sell products at low prices	37	37.37
3	Quality of the inputs borrowed is low	13	13.13
4	High prices for the inputs	25	25.25
5	Short repayment time	59	59.6
6	Limited amount of cash	72	72.7
7	Until the loan is repaid, I will be in tension	54	54.5
8	I will feel dependent	29	29.3
9	Shame	38	38.38

Source: survey, 2018 *Multiple answers

Table 5. Fallouts for being a defaulter in informal credit*

No.	Fallouts	No. of farmers	Percentage (%)
1	Loss of credibility	86	86.9
2	I will be compelled to sell my livestock	26	26.2
3	Sell a part of my land or leased it out	17	17.2
4	Conflict	49	49.5
5	I don't know	7	7.07

Source: survey, 2018 *Multiple answers

4. Conclusion

Little is known about the informal credit for agriculture in Afghanistan. This paper was written to fill this gap. It was found that informal credit for agriculture had two features and five types. Profit and social orientation were the two main features. The five types were Musawamah credit, Grawee, Qarzi Hassana, Peshaki, and Sudh. Qarzi Hassana and Musawamah credit were the two main sources. Without Sudh, which the only type is not complying with Islamic doctrines, the other types of informal credit are mainly granted either without interest or with implicit interest, which most of them are in line with Islamic doctrines. The amount and terms and conditions are very heterogeneous. The implicit interest rate was higher in the case of Peshaki credit. The number of purposes for which Qarzi Hassana and Peshaki were utilized was higher compared to the other types.

The two important reasons for obtaining informal credit were the easiness in its availability and the need to expand existing or undertake a new farming activity. The main reasons for not participating in formal credit were the religious constraints and not having information on how to get credit from a formal source. The two main problems faced by the respondents in utilizing informal credit were the short term and the limited amount of money, which implies that informal credit is insufficient to them. Moreover, the farmers sensed dependency and inferiority for being informal credit users.

As the implicit interest rate in the case of Peshaki credit was higher, the government should control traders and wholesalers who extend this type of informal credit to the farmers. A certain threshold should be specified for Peshaki credit, so if the price of a particular commodity increases from that threshold, the extra money should be returned to the farmers. It is also proposed that banks should include Peshaki (Salam in Islamic banking terminologies) as one of their financial products. To successfully compete with the informal credit, the interest rate should be lower than those in the traditional sector. To make it more efficient, it can also be combined with group lending. Musawamah credit was one of the main sources of credit for the farmers. The price offered by the input suppliers and the quality of inputs given to the farmers as Musawamah credit should be controlled. It is also suggested that financial institutions should consider endorsing a financial product similar to Musawamah credit to the farmers.

The dependence of farmers on informal credit should be decreased through increasing demand for formal credit by awareness building. Extension services can also play an important role in awareness building and in linking farmers to financial institutions. It is also essential that the formal credit extended to the farmers should comply with the Islamic doctrines. This will increase farmers' confidence. Furthermore, the credit should be extended to the farmers in a sufficient amount and for a period convenient for them to repay it.

Notes

- ¹ The district and the province are with the same name.
- ² Opium cultivation is very capital and labour intensive. Although its cultivation is considered illicit by the government, Afghanistan is the largest producer of opium in the world.
- ³ The annual rental value of the leased-out land, house, etc., were divided by the amount of money received by the farmers and multiplied by 100.
- ⁴ Although the creditor lends a considerable amount in this type of contract; he is in no worry for the debtor's default.
- ⁵ Construction of broiler farms and cattle sheds.

References

- Afghan Web. (n.d.). Geography of Afghanistan. Retrieved online on 2/08/ 2019 via <https://www.afghan-web.com/geography/>
- Amjad, S. and Hasnu, S. (2007), Smallholders' Access to rural credit: Evidence from Pakistan, *The Lahore Journal of Economics*, 12(2), 1-25.
- Anjugam, M. and Ramasamy, C. (2007), Determinants of women's participation in self-help group (SHG)- led microfinance program in Tamil Nadu, *Agricultural Economics Research Review*, 20(2), 283-298.
- Asante-Addo, C., Mockshell, J., Zeller, M., Siddig, K., and Egyir, I. S. (2017), Agricultural credit provision: what really determines farmers' participation and credit rationing? *Agricultural Finance Review*, 77(2), 239-256. DOI: 10.1108/AFR-02-2016-0010
- Ashraf, M., Director, K., Akram, K., Joint, B., Ahmed, M., and Ahmed, A. (n.d.). State Bank of Pakistan guidelines on Islamic financing for agriculture, Agricultural credit department, State bank of Pakistan, Retrieved online on 05/08/2019 via <http://www.sbp.org.pk/guidelines/IslamicAgriculture/Guidelines-Islamic-Financing-Agriculture-01-09-2008.pdf>
- Attai, M. I. (1978). *Encyclopedia of the Pashtoon tribal terms*, Afghanistan academy of sciences, international Pashto research center, Kabul.
- Bhuiyan, A. B., Chamhuri, S., Islam, M. A., and Rashid M. (2012). The approaches of Islamic and conventional microfinance for poverty alleviation and sustainable livelihood, *American Journal of Applied Sciences*, 9(9), 1385-1389.
- Chaudhuri, S. and Gupta, M. R. (1996). Delayed formal credit, bribing and the informal credit market in agriculture: A theoretical analysis. *Journal of Development Economics*, 51, 433-449.
- CSO (2018). *Statistical Yearbook of Afghanistan: 2017-2018*, central statistics organization of Afghanistan. Kabul.
- Demirguc-Kunt, L., Klapper, D., and Singer, P., V. (2014). *The Global Findex Database 2014. Measuring Financial Inclusion Around the World*, Policy Research Working Paper No. 7255, The World Bank, Washington.
- Elhiraika, A. B. (1996). Risk-sharing and the supply of agricultural credit: A case study of Islamic finance in Sudan. *Journal of Agricultural Economics*, 47(3): 390.
- Floortje, K. and Pain A. (2007). *Finding the Money: Informal Credit Practices in Rural Afghanistan*, Afghanistan research and evaluation unit synthesis paper series, Retrieved online on 06/02/2019 via <https://areu.org.af/wp-content/uploads/2017/04/715E-Finding-the-Money-SP-web.pdf>
- Garret, H. E. and Woodworth, R. S. (1969). *Statistics in Psychology and Education*, Bombay, Feffer and Simons Pvt. Ltd, pp: 329.
- Guirking, C. (2008). Understanding the co-existence of formal and informal credit markets in Piura, Peru, *World Development* 36(8), 1436-1452.
- Holle, N. (2017). *Input Supply Finance*. Working paper. Agricultural Finance Support Facility World Bank. Retrieved online on 09/08/2019 via [https://www.agrifinfacility.org/sites/agrifin/files/Images/2 Input Supply Finance AgrifinTechSummary.pdf](https://www.agrifinfacility.org/sites/agrifin/files/Images/2%20Input%20Supply%20Finance%20AgrifinTechSummary.pdf)
- Hussain, M. H. (2009). *State of Microfinance in Afghanistan*. Institute of microfinance (InM): As part of the project on state of microfinance in SAARC countries. Retrieved online on 09/08/2019 via <http://inm.org.bd/wp-content/themes/inm/pdf/Afghanistan.pdf>
- Kantor, P. and Andersen, E. (2007). *Microcredit, informal credit and rural livelihoods: A village case Study in Kabul Province*, United Kingdom's Department for International Development, DFID. Retrieved online on 02/08/2019 via https://www.ecoi.net/en/file/local/1216099/1228_1194872548_microcredit-kabul-cs-1.pdf
- Karaivanov, A. and Kessler, A. (2018). (Dis)advantages of informal loans – Theory and evidence. *European Economic Review*, 102, 100-128. DOI: 10.1016/j.euroecorev.2017.12.005
- Karlan, D., Savonitto, B., Thuysbaert, B., and Christopher U., (2016). Impact of saving groups on the lives of the poor, *Proceedings of the National Academy of Sciences of the United States of America* 114(12) 3079-3084
- Klijn, F. (2006). *Informal credit practices in rural Afghanistan. Case study 1: Herat*. Afghanistan Research and Evaluation Unit, Kabul, Afghanistan. Retrieved online on 08/08/2019 via <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan024222.pdf>
- MAIL (2016). *National comprehensive agriculture development priority program 2016-2021: A strategic framework for agriculture*

- sector development and reform. Government of Islamic Republic of Afghanistan, Ministry of Agriculture, Irrigation and Livestock, Kabul. Retrieved via <http://extwprlegs1.fao.org/docs/pdf/afg167994.pdf>
- Manig, W. (1999). Formal and informal credit markets for agricultural development in developing countries - The example of Pakistan, *Journal of Rural Studies*, 6(2), 209-215. DOI: 10.1016/0743-0167(90)90007-U
- Mohieldin, M. and Wright, P. (1994). Formal and Informal Credit Markets in Egypt. Working paper # 9415, department of economics, university of Warwick, Coventry CV4 7AL, England. Retrieved online on 20/07/2019 via <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/34277/126329.pdf?sequence=1>
- MUDH (2017). Afghanistan housing profile. Ministry of Urban Development and Housing, Government of Islamic Republic of Afghanistan and UN-Habitat. Retrieved online on 05/08/2019 via <http://www.acbar.org/upload/1494238797113.pdf>
- Norvell, D. G. (1972). *Agricultural Credit in Afghanistan: A Review of Progress and Problems from 1954 until 1972*. United States Agency for International Development, Kabul, Afghanistan.
- NRVA (2005). *The National Risk and Vulnerability Assessment*. Central Statistics Organization of Afghanistan. CSO. www.cso.gov.af
- Obaidullah, M. and Khan, T. (2010). *Islamic Finance Instruments and Markets*. London, United Kingdom, Bloomsbury Information Ltd.
- Pain, A. (2008). *Opium poppy and informal credit*. Afghanistan Research and Evaluation Unit Issue Paper Series. Afghanistan Research and Evaluation Unit, Kabul. Retrieved online on 20/07/2019 via https://www.ecoi.net/en/file/local/1231617/1002_1225125226_afghanistan-poppy.pdf
- Paul, O. C. and Osmond, O. N. (2016). The principles of Islamic banking and the Nigerian business environment, *International Journal of Business and law research*. 4(1): 46-56
- Pischike, V., Adams, D. V., and Donald, G. (1983). *Rural financial markets in developing countries: Their use and abuse*. John Hopkins University Press. Baltimore.
- Pradhan, N. C. (2013). Persistence of informal credit in rural India: Evidence from 'all-India debt and investment survey' and beyond. RBI Working Paper Series, 5. Paper No. 8038. Retrieved on 20/07/2019 via <https://mpr.ub.uni-muenchen.de/80381/>
- Qur'an, 2: 275 (n.a.) translated by Talal Itani, Hertfordshire: ClearQuran, Beirut.
- Rajeev, M. and Deb, S. (1998). Institutional and non-institutional credit in agriculture: Case study of Hugli district of west Bengal. *Economic and Political Weekly*. 33, 47-48.
- Saiti, B., Afghan, M., and Noordin, N. H. (2018). Financing agricultural activities in Afghanistan: a proposed salam -based crowdfunding structure. *International Journal of Islamic Finance*, 10(1), 52-61. DOI: 10.1108/IJIF-09-2017-0029
- Saleem, S. T. (1987). On the determination of interest rates in rural credit markets: A case study from the Sudan, *Cambridge Journal of Economics*, 11, 165-172.
- Santos, D. B., Mendes-Da-Silva, W., and Gonzalez, L. (2017). Lower financial literacy induces use of informal loan, *Revista de Administração de Empresas*, 58(1), 44-59. Retrieved online on 09/08/2019 via http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-75902018000100044&lng=en&nrm=iso.
- Saqib, L., (2011) *Financing agriculture through Islamic commercial transactions (theory and practice)*, Lambert Academic Publishing. pp: 43
- Senzai, M. O. and Harlan, R. K. (1963). *Report on Economic Survey of Agriculture in Nangarhar Province*, Faculty of agriculture, Kabul university, Kabul, Afghanistan.
- Singh, S., Kaur, M., and Kingra, H. S. (2009). Inadequacies of institutional agricultural credit system in Punjab state, *Agricultural Economics Research Review*, 22, 309-318. Retrieved online on 05/03/2019 via <https://core.ac.uk/download/pdf/6689603.pdf>
- Tang, S. and Guo, S. (2017). Formal and informal credit markets and rural credit demand in China, 4th International Conference on Industrial Economics System and Industrial Security Engineering (IEIS). DOI: 10.1109/IEIS.2017.8078663
- Taylor, L. (1983). *Structuralist macroeconomics: Applicable models for the third world*. Basic Books, New York.
- UNDCP (1999). *The role of opium as a source of informal credit*. Strategic Study no. 4. United Nations International Drug Control Program, Kabul, Afghanistan.
- UNODC (2003). *Opium Poppy Cultivation in a Changing Policy Environment: Farmers Intentions for the 2002-2003 Growing Season*. United Nations Office on Drugs and Crime.,” Strategic Study no. 9, Kabul, Afghanistan.
- Wajid, R. A. and Kaleem, A. (2009). Application of Islamic banking instrument (Bai Salam) for agriculture financing in Pakistan, *British Food Journal*, 111(3), 275-292 DOI: <https://doi.org/10.1108/0007070091094147>
- Yusuf, H. O., Ishaiah, P., Yusuf, O., Yusuf, H. A., and Shuaibu, H. (2015). The role of informal credit on agriculture: An assessment of small-scale maize farmers utilization of credit in Jema Local Government Area of Kaduna State, Nigeria, *American Journal of Experimental Agriculture* 5(1), 36-43. DOI: 10.9734/AJEA/2015/12099