ISLAMIC VALUE CHAIN FINANCING: A CASE FOR SUSTAINABLE FINANCING OF SMALL FARMERS IN KASHMIR

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ABSTRACT

Systematic sustainable global growth of Islamic banking and finance has become a significant feature of mainstream finance with high potential to reach out for financial inclusion of both Shari'ah compliant finance and small holders. It has also proved resilient during the financial crisis of 2008-2009 - which it owes to the prudent trading and investment practices guided by the Shari'ah (Hasan & Dridi, 2011). Galfy and Khiyar (2012) reviewed and found various indicators of Islamic banking industry's contribution to economic growth as well as the performance during the 2008 financial crisis and observed that Islamic Banks portray significant contribution to macro-economic growth and financial stability. Similar, studies like Furqani & Mulyany (2009), Yazdan & Hossein (2012) and Al-Oqool, Okab & Bashayreh (2014) also provide empirical evidence on contribution of Islamic Banking to real GDP growth. Agriculture and farming being the oldest primary occupation not only provides livelihood for the people, but ensures food security and sustainability of a nation. In most developing economies majority of agriculture holdings are small. In the Kashmir division of the state of Jammu & Kashmir, India, majority of agriculture land holdings are categorized as marginal and small.. These small and marginal farmers face a number of issues such as lack of irrigation, road, transportation, storage facilities, lack of proper fertilizers, pesticides, agricultural machinery, sparse coverage of arable land, and limited formal credit availability. However, among the prominent issues identified for small farmer growth and development is timely, affordable and effective credit facility. These issues in-turn affect the food productivity and agriculture sustainability of the nation. Consequently, small farmers' income growth, development and sustainability are also affected by the lack of infrastructure, market and credit. These factors affect the general Economic Climate of the country while specifically affecting the sustainable agriculture development.This research appraises the potential of value chain financing approach which comprehensively provides for timely and effective credit at each stage of the value chain for small farmers. The value chain financing approaches the farmer as an entrepreneur in the seasonal agriculture business sector rather than an individual entity isolated from the real economic scenario, as evident in current conventional financing practices. Moreover, the use of Islamic financial contracts for value chain financing for small farmers is highlighted as a sustainable solution. Islamic financial contracts price and share the risks innate to value chain financing. With the three characteristics of flexibility, proximity and representativeness peculiar to Islamic finance as well as value chain financing of real assets, a conceptual model is proposed to enhance a sustainable and comprehensive development of small farmers, leading to inclusive and sustainable economic growth.

Key words: Islamic Finance, Value Chain, Agriculture, Small Farmer

Introduction

Overview of Sustainable Global Islamic Finance

Islamic banking and finance today has reached remarkable importance, growth and recognition in the national and international level with total global assets as of 2014 standing at USD 1.658 trillion contributed by 933 Islamic financial institutions functioning globally (ICD/Thomas Reuters, 2014). Operating on the clearly established Shariah principles of prohibition of Riba, *Maysir* (i.e. gambling) and *Gharar* (i.e. excessive uncertainty)(Obaidullah, 2015), Islamic Finance also encompasses the broader injunctions and purpose of Shariah (*Al Maqasid Al Shariah*) , i.e. justice in socio-economic system (Dusuki, 2008).

Islamic banking and finance has grown to establish systemically important presence in the global scenario and provides for a satisfactory alternative to the mainstream financial practices. It has also proved itself resilient during the financial crisis of 2008-2009 - which it owes to the prudent trading, investment and ethical governance practices guided by the Shariah. Hence, the higher capitalization and liquidity reserves that Islamic banks maintained helped to make them more resilient and increasingly stable in comparison to the conventional banks, especially during the 2008 Global Financial Crisis. (Hasan & Dridi, 2011).

The potential Islamic finance holds for sustainable financing and economic development is traced to three significant contributions the alternative financial system capacitates to provide – greater financial inclusion, emphasis on asset backed financing and, risk-sharing feature and prohibition of speculation (IMF, 2015). As has also been quoted by the Bank Negara

Malaysia's Governor Dr. Zeti Akhtar Aziz - Islamic Finance has portrayed an array of capabilities towards mobilization and allocation of funds for generating productive economic activity and inclusive growth. This has been attributed to the three important elements Islamic Finance incorporates viz. capability in responding to the customer needs which reflects its dynamism, the ability to maintain its competitive stance and the resilience Islamic finance portrays indicating the sustainability of the alternative system(BNM, 2010).

The same holds true for the contribution of Islamic financial system to real GDP growth, in special reference to enhancing agriculture sector's sustainability and growth. As in the case of Iran, the change of the conventional interest banking system to that of an interest free system specifically promoted the growth in the agriculture sector while increasing employment opportunities and contributing to the labour force in the Iranian agriculture sector(Sadr, Kafaie & Haidri, 2008). Other studies such as Furqani & Mulyany (2009), Yazdan & Hossein (2012) and Al-Oqool, Okab & Bashayreh (2014) have established through empirical investigation a positive trend between Islamic bank financing and the real GDP growth of the selected countries, indicating the sustainable financing option promoted by the asset based feature of Islamic financing.

Although the potential Islamic finance holds, specifically for the case of agriculture sector's sustainable development, yet remains to be explored. However, numerous exiting practices in Sudan, Indonesia and Pakistan have been identified where the Islamic Micro Financial Institution's adopt a "project" based approach where multitude of areas, other than finance, such as technology, marketing, production etc. are focused (Obaidullah, 2015).

However, in light of the current deliberations of 'value-chain' approach for commercialization of smallholder production to enhance the agri-business to improve rural populations' incomes and livelihood situation by helping to link producers to processors and markets(IFAD, 2015), Islamic finance has yet to explore the potential of its risk sharing approach through agriculture value chain financing for smallholder farmers. Hence the motivation of this study is to extend the risk pricing and sharing through value chain in Islamic finance to small holder farmers.

As in the case of India, and correspondingly in the Kashmir, two fold problem in the agriculture is prevalent, viz. the agricultural and the agrarian. Where the former relates to the problem of inadequate resources and developmental issue, the latter relates to the crisis for sustenance and livelihood of small farmers (Mishra, S. and Reddy, 2011). The lack of infrastructure, market and credit is evident; affecting both the State agriculture output as well as the individual farmer's livelihood. Moreover, the prevalence of informal credit at unusually high rates of interest affecting the very livelihood of these small farmers, leaving them in the vicious cycle of indebtedness, is among the major factors affecting the small farmers livelihood and agricultural sustainability(Pradhan, 2013)(Shah, Rao, & Shankar, 2007). Formal credit disbursement avenues are being addressed by the priority sector lending by Scheduled Commercial Banks, yet 26.34% of rural people (about 1/5th of the State's population), where majority constitute the small farmer category, are ranked as living Below Poverty Line (Digest of Statistics, 2011-2012). These small and marginal farmers are categorized as having lower income, less savings and low capital formation (Saboor, Hussain and Munir, 2009). The lack of timely and affordable credit mars the productivity, income generation and asset formation for sustainable livelihood of small farmers of Kashmir, eventually affecting agriculture and agribusiness sustainability towards better economic viability.

As such, this paper presents a conceptual model on the use of various Islamic financial contracts through a typical agriculture value chain in order to assess the prospectus of usage of Islamic finance for inclusive growth of small farmer through assessing the advantages as well as the challenges and limitations entailed in the adoption of Islamic financing for agriculture value chain for smallholder poverty alleviation and agricultural sustainable development.

The current paper is divided into five sections. The first section is the introduction to the current paper. The following section elaborates on the current issues of smallholder farm financing with special focus on Kashmiri smallholder. The subsequent sections explain the concept of value chain financing and the elucidation on Islamic Financial contracts for value chain financing. Section four portrays the use of Islamic Financial Contracts across a typical value chain which is followed by the conclusion in section five.

A Review of Literature on the Issues of Farm Financing and Smallholders of Kashmir

Agriculture in general is regarded as a risky avenue by financers due to various inherent risks involved such as the weather related risks, natural disasters, biological and environmental risks, and market risks, that affect the return on investment of the financer. Similarly, and more specifically for the case of smallholder financing, the opportunities for risk mitigation for the financers is limited as the small farmers are largely and commonly categorized as 'risky' due to their lesser capacity to provide collateral for formal financing, and in some cases the capacity to return the borrowed amount.

However, the less 'credit-worthiness' of smallholder farmer is in fact a reflection of numerous issues that they face such as lack of irrigation facilities, road and transportation facilities, storage facilities, lack of proper fertilizers, pesticides, agricultural machinery, sparse coverage of arable land, and limited formal credit availability. These issues in-turn not only affect the food productivity and agriculture sustainability of the nation but also small farmers' income growth, development and sustainability are affected by the lack of infrastructure, market and credit.

The small and marginal lands are categorized in the Indian Agriculture Census Report 2011 as: (1) marginal land size below 0.5 to 1.0 hectares of land, and (2) small land holding 1.0 to 2.0 hectares of land (Agriculture Census, 2011). In the Kashmir division of the state of Jammu & Kashmir, India, majority of agriculture land holdings are categorized as marginal and small, constituting about 93.78% of the total land holdings (J&K economic survey, 2013-14). The total percentage of cultivators and agriculture labourers is 39.79% in relation to the total worker population, portraying the dependence on agriculture of majority of the rural Kashmiri population.

Table 1: Agricultural Holdings in J&K State

S. No.	Category of Holdings	No. of Operational Holders (in 000)	Area operated (000 Hec.)	Average size of operational holding (in Hec)
1.	Marginal (Less than 1 Hec.)	1122.97 (81.50)	406.00	0.36
2.	Small (1.0 to 2.0 Hec.)	169.17 (12.28)	237.00	1.40
3.	Semi-Medium (2.0 to 4.0 Hec.)	71.40 (5.18)	193	2.70
4.	Medium (4.0 to 10.0 Hec.)	13.65 (0.99)	74.00	5.42
5.	Large (10.0 and above)	0.62 (0.05)	12.00	19.35
	All Holdings	1377.81 (100.00)	922.00	0.67

(Figures in brackets indicate percentage) Source: Economic Survey, J&K, 2013-14

Numerous factors contribute to the sustainable development of small farmers such as literacy, public facilities, high quality input, land size, high transportation cost, road density, road network and connectivity, lack of storage infrastructure, transportation and credit accessibility and availability (Binswanger, Khandker, & Rosenzweig, 1993)(Iqbal, M , Ahmad, M and Abbas, 2003)(Poliquit, 2006)(Saboor, Hussain, and Munir, 2009)(Kaleem & Wajid, 2009)(Das, Senapati & John., 2009)(Rajeev, Vani, & Bhattacharjee, 2012)(Thorne, 2013)(Biradar, 2013)(Baba, Wani, Wani, Zargar, & Qammer, 2014)(Obaidullah, 2015). Conversely, several issues are present in attaining the above factors especially for smallholders. According to Baba et al. (2012), the general problems perceived by farmers in Jammu & Kashmir are inadequate extension staff, sloppy fields, engagement with subsidiary occupation, illiteracy, land conflicts, low or no subsidy, lack of consultancy and guidance, small and scattered land holding and joint farms(Baba, Wani & Zargar, 2012). Besides this, Dev (2012) attributed the issues and challenges faced by small and marginal farmers of India to factor such as limited human resource, inadequate access to suitable extension services, marketing, poorer access to public goods for irrigation, transportation and poor quality land & water management, as well as the persistence of informal credit due to unavailability of formal credit avenues.

However, the issue in availing formal credit is amongst the prominent challenges faced by small farmers that affect the income sustainability, asset growth and development of the small farmers. Ghosh & Roy (2014) attributed four hindrances viz. collateral unavailability, low access of marketing system to institutional credit, lower returns and increased expenditure on inputs that bar the use of formal credit by small farmers in eastern India. However, the main hindrances attributed to availing formal credit by small Kashmiri farmers are lack of publicity, lack of perspectives, cumbersome loaning procedures, lack of knowledge on credit sources / methods, untimely credit availability, costly credit, lack of risk bearing capacity, bribery, strict social values, absence of banking facilities, lack of collateral and uncertainties in yield & price (Baba, Wani & Zargar, 2012). However, there are mainly five factors that have been identified as major issues faced by small and marginal farmers with regard to credit availability. These include costly credit, lack of collateral, untimely credit availability, complicated and intricate loan procedures and access to credit(Shah, Rao, & Shankar, 2007) (Das et al., 2009) (NABARD Report on Credit Related Issues of Farmers in India, 2010) (Mishra, S. and Reddy, 2011)(Dev, 2012)(Sandhu, N. &Hussian, J., 2012) (Pradhan, 2013) (Biradar, 2013)(Ghosh & Roy, 2014). Consequently, high usage of informal credit as the sources of funds used by small and marginal farmers is prominent issue prevailing in the Kashmir's agriculture. These small farmers opt for informal sources of credit mainly due to ease of accessibility and the dire need for survival (Das et al., 2009). The largest portion of informal credit flows from the traders and commission agents (Pradhan, 2013). The main usage of informal loans is ascribed to increased non-farm expenditure (such as education, health etc.) with minimal funds available for farm activities (Satyasai, 2015). The main cause attributed to this trend is the limited use of formal credit by the farmers thus making them rely more on informal sources. This reflects the inefficiency as well as insufficiency of bank credit for farm activities that fail to generate real income growth for asset formation as against income growth for mere consumption. Therefore, there is a need of increased focus on imparting proper instruments of financing - focusing on asset formation rather than mere consumption for small farmers. The commercial banks are among the major providers of formal credit to agriculture, however various issues still remain especially for small and marginal farmers to avail the opportunity.

As such, the need and importance of credit for overall development of agriculture as well as for achieving economic development of rural poor vastly represented by small and marginal farmers needs to be assessed. However, the value chain financing approaches sustainable development needs of small farmers in a comprehensive manner. Therefore, further elucidation on the nature of financing in value chain approach needs to be assessed.

Methodology

As an exploratory study of current financing practices of small and marginal farmers, the current paper has adopted a critical analytical approach to the problems of financing of small holder farmer. Extant value chain activity of typical agriculture activity is analysed to examine the various stages of agriculture production process as well as how the process is integrated. The paper then associates the value chain structure to the conventional financing which give both collateral and time based focus on credit risk. Effectively trade credits which require adequate security to the impersonal financier or lender who does not relate to the risk exposure of agriculture produce would not be feasible. This leads to the 'financial inclusion' issue. From a conceptual understanding of the 'value chain financing needs' which varies from the early stage to the final produce, it can be assessed that the conventional financing model's risk appetite could not adapt to the value chain finance needs expectations. Hence this method explores a more robust, flexible, representative and proximate conceptual model that can be identified with the risk appetite. Robust in terms of uncertainty in agriculture conditions and produce, flexible in terms of different financing needs at each stage of the value chain process, representative in terms of investor and financier expectations at each stage of financing and proximate to the cause of value creation. Hence with these attributes a model is posited to consider the appropriateness of relevant equity and trade finance contracts in Islamic finance to be adopted for the value chain finance approach.

As the current paper is conceptual in nature, a descriptive approach to suggest the use of value chain financing has been used. Moreover, the explanation on the usage of Islamic financial contracts along the various stages of a typical agriculture value chain has adopted descriptive-analysis approach in order to identify the potential of Islamic financial contracts for integrative approach to financing as proposed in value chain financing.

Discussion

Value chain financing and Islamic Financial contracts

Value chain is defined as "sequence of value adding activities, from production to consumption, through processing and commercialization"(Miller & Jones, 2010). Value chain financing involves financing of the players within the value chain in order to enhance productivity and generate profitable returns on agriculture output. In other words, it is the flow of funds towards and within the value chain. Miller & Jones (2010) define value chain financing as "*any or all of the financial services, products and support services flowing to and / or through a value chain to address the needs and constraints of those involved in the chain*." The constraints in a value chain, as mentioned in the definition, are present in the form of access to finance, secured sales, product procurement, risk management and efficiency (Miller & Jones, 2010).

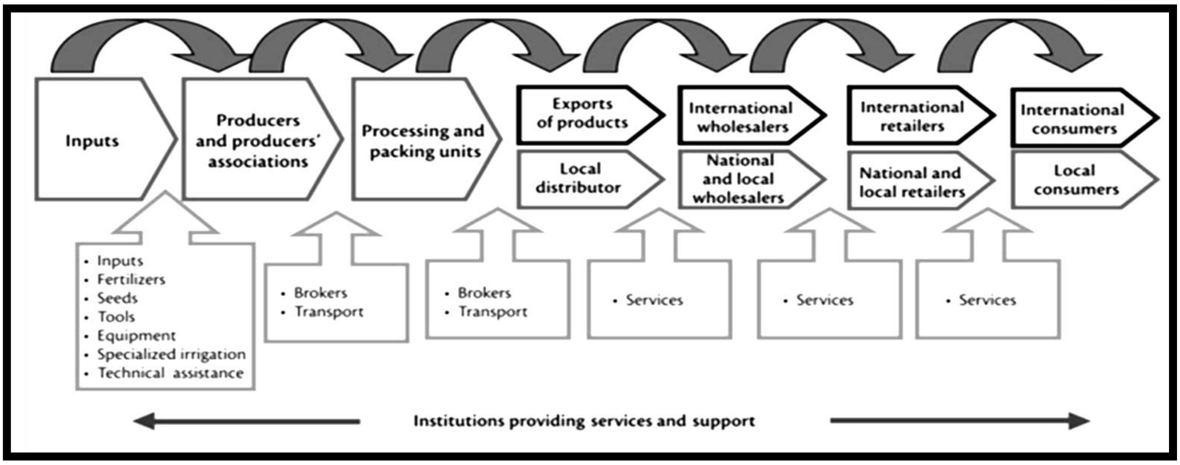
Value chain finance approach provides as a mechanism for small famers to obtain finance without having collateral and reduces the transaction cost, as is the requirement for the conventional financing practices. The reason being as value chain focuses on the whole spectrum of the chain, as a commercial avenue. As such, value chain financing approaches financing from a broader perspective by regarding agriculture as a business unit rather than approaching the farmer as an individual risky borrower. Moreover, the integrated binding nature and the role playing of different participants in the agriculture value chain when comprehensively understood provides for a profitable investment opportunity. This is because value chain concept offers a comprehensive view of the entire agriculture system including the market condition when assessing an investment opportunity, rather than mere credit worthiness and risk evaluation of individual small farmer (Miller & Jones, 2010).

Additionally, value chain financing provides opportunities to disburse effective credit to various players through the value chain. It improves the efficiency and repayments in financing as well as enables comprehensive evaluation of risk exposures through each stage of value chain. Value chain financing approach improves the quality and efficiency in agriculture by:

1. Enabling the institutions to identify the financing needs of each actor in value chain.
2. Enabling tailor made products suitable to the needs of participants in the value chain.
3. Helps in reducing the financial transaction costs through direct discounting of loan payments at the time of sale of produce, and
4. Helps in using and accessing the value chain links and knowledge to mitigate agriculture financing risks.

A typical agriculture value chain financing by external sources can be depicted as under:

Figure 1: Value Chain Financing Approach, Source (Urquidi, 2010)



The above agricultural value chain diagram as explained by Urquidi (2010) is wherein various value chain actors along with the different financing needs required in an agriculture value chain are depicted. It illustrates a broader view on agricultural value chain by providing both local and international perspectives on various participants at each stage of an agriculture value chain. The diagram demonstrated by Urquidi (2010) portrays a typical supply chain along the agriculture value chain as well as the various institutional facilities used at each stage of the value chain. In a peculiar agriculture value chain, the value addition activity starts at the input stage up till the retail stage. Hence for each stage of the value add activity, specific financing needs are to be fulfilled that have been demonstrated by the arrow boxes underneath the value chain diagram. In the case of small farmer, special needs for financing of the input and production stage need to be considered. However, in order to achieve sustainable small farmer development, small farmer integration throughout the value chain by the use of tailor made financing products is needed.

Hence, in the light of the above, the potential of Islamic agriculture financing contracts can be assessed. As a practical example, Obaidullah (2015) describes the nature of financing in countries like Indonesia, Sudan and Pakistan where the Islamic Micro-Finance Institution's (IMI) adopt a "project" based approach where multitude of areas other than finance such as technology, marketing, production etc. are focused. Moreover, Abdalla (1999) illustrated the potential of Musharakah contact (Islamic partnership contract) in eliminating the current problems of depletion of assets due to inflation, and threat to livelihood of an entrepreneur due to losses by promoting risk sharing between the bank and the client (in this case being small entrepreneurs). Hence, this example being extended to the situation of small farmers seeking investment credit can also contribute to in formation of sustainable assets and generating sufficient income.

An example of financing of poor farmers of Palestine cultivating Olive that has been supported by the Islamic Development Bank (IDB) is noteworthy to illustrate the potential of Islamic financial contracts for agriculture value chain financing. In this project, a composite model of Muzara'ah, Salam and Murābahah contracts is undertaken wherein initially; a Muzara'ah contract is entered into by the landowners and the poor farmers. Thereafter, a Salam contract is executed for financing of inputs (olive seeds and fertilizers). In the project, the Islamic Microfinance Institution not only is involved in each stage of the value chain, but also upon the collection of the olive harvest by the IMI, it sells it to the olive oil mills for a profit (Obaidullah, 2015).

Worth to note is the consequences that take place in case of unfavorable result under both conventional loan and Islamic financing. Under the Islamic financing, the landowners are affected by loss of potential profit through Muzara'ah, the IMI suffers loss due to non-execution of sale of produce under Salam agreement and finally, the farmer is only liable for payment of advance money to the IMI under Salam. However, this situation would change considerably in the case of conventional loan where the farmer is liable to pay the rental due to landlord, and loan as well as principal due to the bank; thus bringing the whole burden on the poor farmer (Obaidullah, 2015).

As such, it is clearly evident that Islamic financial contracts hold the essence of risk sharing as is the case in value chain financing concept. Moreover, various Islamic financial contracts are offered by Islamic Financial Institutions (IFI) that are popularly used for agriculture financing. These include 1) Participatory Profit and Loss contracts (Musharakah, its variant forms, Musawamah, Muzara'ah and Mudharabah) 2) Exchange Based contracts (Salam, Murabaha and Istisn'a) 3) Charity contract (Qard al Hassan) and 4) Lease contracts (Ijarah and its variant forms) (Oladokum, Larbani and Mohammed, 2015).

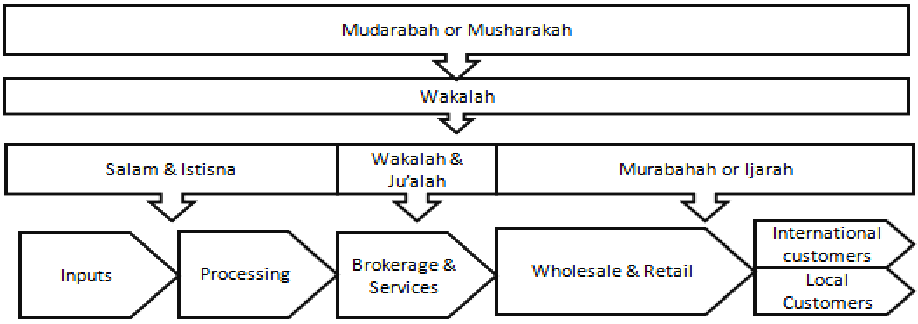
However, Islamic financial contracts do possess unique risks which need to be addressed in specific manner. There risk is more evident as Islamic financial contracts are based on Shariah injunctions which may not match with the current financial system due to differences in ideological principles both systems operate on. Nevertheless, Islamic financial contracts possess the capability of poverty alleviation, development and sustainable income generation for small farmer which conventional financial instruments have failed to address.

Islamic Value Chain Financing – Sustainable Solution for Smallholder Farmers

Based on the risk factors addressed by the Islamic financial contracts, a depiction of possible use of Islamic financial contract for agriculture financing through a value chain approach has been proposed in Figure 1. The portrayal of use of Islamic financial contracts at each stage of a typical agriculture value chain financing are seen to be holding the capacity to finance each stage of the value chain in an integrated manner, specifically through the contracts of Musharakah and Mudharabah. These contract show greater scope for application in value chain financing approach for integrated development of small farmer.

A comprehensive approach of financing for sustainable development of small farmers, Musharakah and Mudharabah contracts are most relevant as depicted through the Figure 2– provided the risks faced in partnership contracts is mitigated through proper market, governance and policy systems.

Figure 2: Portrayal of Value chain hierarchy of contracts from counterparty transaction to Institutional equity arrangement



The characteristics of risk sharing, integrating sale based contracts for financing, and real market based transactions are central to Islamic financial contracts. As such, the concept of value chain financing coupled with usage of Islamic financial contract provides a novel perspective to financing needs of small farmers. Both Islamic financial contracts and value chain financing approach aim at capacity building, income generation, poverty alleviation and asset formation for sustainability in a comprehensive manner, rather than mere fulfillment of financing needs for particular agricultural activity as can be seen in the current credit disbursement avenues.

Both equity and exchange contracts are specified and identified to each stage of the value chain financing. As co-owners of the value chain in equity based financing such as Mudharabah and Musharakah, both farmers and financiers would expect complete and timely disclosure to commensurate with the risks sharing by both parties. In addition the contracting parties are well informed of the expected output price at each stage to mitigate the risks. On identifying and choosing the appropriate exchange contract for each stage, the 'nature of goods and services' and 'value certainty' is critical to determining the risk exposure. In both Salam and Istisn'a' contracts, goods are yet to be made available or produced, hence the process information in value add chain that contribute to value certainty is fundamental to risk mitigation. With reference to processed goods to be delivered, the spot or deferred (Murābahah) sale risk significantly attributed to price and credit risk. Value certainty relates to mitigation of customer credit and supplier delivery risk in the exchange. Alternatively minimal risk exposure of the bank as agent could be in the form of Wakalah trade credit to facilitate marketing network and related services where agency fees are earned. Given the high potential of bank finance engagement at each stage of value chain finance, the scope and depth of financial governance of value chain would require a specialized institution with suitable risk appetite for the agriculture sector.

Conclusion

This paper has elucidated upon the prospectus of use of Islamic financial contracts across the stages of value chain for inclusive financing of small farmers in Kashmir.

It is observed that for comprehensive development of small farmers, farmer linkage and increased involvement through the value chain is evident. Also, due to lack of enough assets and funds, farmers require external financing through formal agencies like commercial banks. However, the current conventional agriculture financing products do not approach these comprehensive financing needs of the farmers due to their restrictive stance towards small farmer financing. This is more evident as the attitude for smallholder financing in the conventional financing method is that of an individual unit rather than taking the inclusive approach through value chain financing. Alternatively a viable option for financing of smallholder farmer through the value chain is highly suitable for sustainable growth, development and income generation of the farmer, the agriculture sector and the economy of developing nations.

Moreover, Islamic financial contracts provide a viable option for the value chain financing approach to smallholder development. The Islamic financial contracts share three main characteristics with value chain financing that are innate to the concept of risk sharing, inclusiveness and integration identifiable in a value chain financing viz. flexibility, proximity and representativeness.

Islamic financial contracts offer a wider range of financing options as compared to the current practice of financing instruments available. Depending on the nature of transaction, the risks appetites of the parties involved, the economic conditions as well as the financing needs of the farmers, Islamic financial contracts provide options for partnerships, project financing, asset financing and working capital financing. This reflects the flexibility offered by Islamic financial contracts

Also, Islamic financial contracts are proximately close in features for each stage of value chain financing. This is evident in the flexibility of modelling Islamic financial contracts by amalgamating various contracts into one product for each stage of financing of value chain. Furthermore, as the productions stage is the most important for financing needs of small and marginal farmers, Islamic financial contract of Salam in particular provide close proximity to the nature of financing as well as the need that is addressed for the production stage.

As has been expounded upon earlier, the concept of value chain financing entails risk sharing between the various parties of the value chain as well as the external fund providers. Similarly, the Islamic financial contracts in general, and the contract of Musharakah and Mudharabah in particular provide for the same risk expectation as anticipated in the value chain financing approach. This portrays the characteristic of representativeness of the risk expectations of value chain viz. a viz. Islamic financial contracts.

However, the practical implications on adoption of value chain approach and Islamic financing for smallholders in Kashmir yet remains to be explored. Also, the practical feasibility of Islamic value chain financing in an integrated well-established agriculture value chain can form the subject matter of future researches. Nevertheless, a conceptual background to explore the feasibility of Islamic financial contracts for agriculture value chain has been attempted in the current paper..

References

BNM (2010), Islamic *Finance: An Agenda for Balanced Growth and Development*, Bank Negara Malaysia, retrieved from: http://www.isdb.org/irj/portal/anonymous?NavigationTarget=navurl://a60b98a8e4f1ebf3dc9fd8650aa4617f

Abdalla, M. G.-E. (1999), *PARTNERSHIP (MUSHARAKAH): A NEW OPTION FOR FINANCING SMALL ENTERPRISES?* Arab Law Quarterly, 14, 257–267

Baba, S. H., Wani, M. H., Wani, S. A., Zargar, B. A., & Qammer, N. A. (2014), *Institutional Credit to Mountain Agriculture : Issues of Structural Changes and Impact in Jammu & Kashmir* , Agriculture Economics Research Review, 27, 111–122

Binswanger, H. P., Khandker, S. R., & Rosenzweig, M. R. (1993),*How infrastructure and financial institutions affect agricultural output and investment in India*. Journal of Development Economics, 41, 337–366

Biradar, R. R. (2013), *Trends and patterns of institutional credit flow for agriculture in India.* Journal of Asia Business Studies, 7(1), 44–56

Das, A., Senapati, M., & John, J.(2009), *Impact of Agricultural Credit on An Empirical Analysis in India*,Reserve Bank of Inida Occasioanl Paper 30(2).

Dev, S. M. (2012), *Small Farmers in India : Challenges and Opportunities Small Farmers in India : Challenges and Opportunities*, Indira Gandhi Institute of Development and Research (June), 1–37.

Dusuki, A. W. (2008), *Banking for the poor: the role of Islamic banking in microfinance initiatives*. Humanomics, 24(1), 49–66

Hasan, M., & Dridi, J. (2011), *The Effects of the Global Crisis on Islamic and Conventional Banks: a Comparative Study*, Journal of International Commerce, Economics and Policy, 02(02), 163–200.

Iqbal, M , Ahmad, M and Abbas, K. (2003), *The impact of insitutional credit on agriculutral production in Pakistan.* African Geographical Review, 22(1), 73–78.

ICD/ Thomas Reuters (2014), *Key Global Islamic Finance Statistics*, retrieved from: http://www.cagamas.com.my/sites/default/files/article/Malaysia%202015%20-%20Global%20Islamic%20Finance%20Report.pdf

IFAD (2015), *Sustainable Inclusion of Smallholders in Agriculture Value Chain*, International Fund for Agricultural Development, Rome, Italy, retrieved from: http://www.ifad.org/knotes/valuechain/vc_sun.pdf

IMF (2015), *Islamic Finance: Meeting Global Aspirations,* International Monetary Fund, retrieved from: http://www.imf.org/external/np/seminars/eng/2015/islamicfinance/

Kaleem, A., & Wajid, R. A. (2009), *Application of Islamic banking instrument (Bai Salam) for agriculture financing in Pakistan*. British Food Journal, 111(3), 275–292

Miller, C., & Jones, L. (2010), *Value Chain Finance Tools and Lessons,* Food and Agriculture Organization of the United Nations and Practical Action Publishing, 195.

Mishra, S. and Reddy, D. N. (2011), P*ersistence of Crisis in Indian Agriculture : Need for Technological and Institutional Alternatives Persistence of Crisis in Indian Agriculture : Need for Technological and Institutional Alternatives*, India Development Report 2011, Oxford University Press, New Delhi

Obaidullah, M. (2015), *Enhancing Food Security with Islamic Microfinance : Insights from Some Recent Experiments,* Agricultural Finance Review, 75(2)

Oladokum, Nafiu Olaniyi, Larbani, Moussa and Mohammed, M. O. (2015), *The problems facing the agricultural sector in Nigeria and the prospect of Muzara'ah and supply chain model,* Huamanomics, 31(1), 18–36.

Pradhan, N. C. (2013), *Persistence of Informal Credit in Rural India : Evidence from " All-India Debt and Investment Survey " and Beyond,* Reserve Bank of India Working Paper Series(April).

Rajeev, Meenakshi, Vani, B.P., Bhattacharjee, M. (2012), *Nature and Dimensions of farmers' Indebtedness in India*, Munich Personal RePEc Archive

Saboor, A., Hussain, M. and Munir, M. (2009), I*mpact of Micro Credit in Alleviating Poverty : An Insight from Rural Rawalpindi , Pakistan,* Pakistan Journal of Life and Social Sciences, 7, 90–97

Sadr, K., Kafaie, M., & Haidari, B. (2008), *Islamic Agricultural Finance and Growth*.

Sandhu N, Hussian J, M. H. (2012), *Barriers to finance experienced by female owner/managers of marginal farms in India,* Journal of Small Business and Enterprise Development, 19(4), 640–655.

Shah, M., Rao, R., & Shankar, P. (2007), *Rural credit in 20th century India: overview of history and perspectives*. Economic and Political Weekly. Retrieved from http://www.jstor.org/stable/4419471