Study Summary - Access to Agricultural Finance in Priority Development Regions in Turkey
The EBRD Turkey MSME Lending Programme

The EBRD Turkey MSME Lending Programme combines long term loans by the European Bank for Reconstruction and Development (EBRD) with advisory and training components (Technical Assistance, TA) to a number of selected Turkish partner banks. The TA component of the programme was launched in November 2010.

The overall objective of the programme is to help partner banks participating in the EBRD Turkey MSME Lending programme introduce and/or further accelerate Micro- Small and Medium Sized Enterprise (MSME) lending techniques to the least economically developed regions of the country, thereby increasing access to finance by MSME borrowers. The programme specifically targets MSMEs, farmers and agribusinesses located in rural areas.

Besides the measures supporting MSME lending, the programme offers focused technical assistance measures to increase credit to the agricultural sector and to enable partner banks to lend at stable levels in rural areas of Turkey.

DenizBank, Garanti Bank, Isbank, Vakifbank and Yapi Kredi Bank are partner banks of the programme.

Access to Agricultural Finance in Priority Development Regions of Turkey Study was conducted within the EBRD MSME Turkey Lending Programme
Objectives of the Study

Frankfurt School conducted a market study to elaborate on financing needs of small farmers and agricultural enterprises operating at different levels of the agricultural value chain, analysis of agricultural finance products offered and gap analysis in the market. The study investigates the Turkish agricultural lending market from the perspectives of the financial institutions and from the needs of their potential clients (primary producers and other value chain stakeholders). The broad objective of the study is to better understand the agricultural market potential in the project regions, identify the most appropriate and effective market entry strategies for the Partner Banks and support adapted lending products, lending methodologies and other needed consulting services for the identified markets.
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Overview of the Turkish Agricultural Sector

Turkey’s population is currently 73.7 million people and was growing rapidly with 1.54% growth p.a. in 2010. 23.7% of the total population or approximately 17.5 million people are considered rural residents living in settlements of less than 2,000 inhabitants.

Turkey’s agriculture production was worth 65 billion USD and ranked seventh in the world according to 2010 figures. Agriculture is a very important part of the Turkish economy: although the share of agriculture in GDP is only 8.4%, the sector employs 25.9% of the workforce. With more than USD 17 billion yearly export volume, agriculture sector constitutes 14.1% of total Turkish exports.

The sheer number of small farms is impressive: according to a TurkStat 2006 research, there are about 3 million agricultural enterprises and small farmers in Turkey. However, the size of these enterprises varies widely: the absolute majority of Turkish farms have a land size between 1 and 20 hectares and only 5.7% of farms have land exceeding 20 hectares.

Turkey is the largest producer of hazelnuts, apricots, cherry and sour cherry in the world and a very important producer of pulses and a number of vegetables and fruits. In addition to crop production, animal husbandry contributes significantly to the Turkish economy.

Research Design & Methodology

The study consists of four distinctive parts covering the demand and supply side of the market and providing a gap analysis as well as a special section on the perspectives of value chain finance in Turkey.

Demand Study: To carry out the demand study Frankfurt School conducted a market survey to effectively collect information on the large variety of needs from the very diverse enterprises within the agricultural sector. The analysis comprised of a field survey to more effectively cover the large size of the target group (agricultural producers) and the variety of agricultural products grown in representative regions.

- Sample Design: In order to be in line with Eurostat Classification of Regional Units and provide reliable and comparative information, Turkey has been divided into 26 regions (NUTS II level). 43 project provinces refer to 12 regions on NUTS II level. Field interviews conducted among 12 pre-selected representative regions (Erzurum, Ağrı, Malatya, Muş, Gaziantep, Şanlıurfa, Mardin, Hatay, Kayseri, Kastamonu, Samsun and Ordu).

- Questionnaire Development: Based on the research questions and hypotheses created in consultation with EBRD and partner banks, a (semi-)structured questionnaire was developed. The questionnaire was revised to take into consideration specificities of Turkish agriculture sector. The final questionnaire contained 73 questions.

- Field Interviews: The interviews were carried out during a period of around three weeks from 23rd May to 10th June, 2011. At the end, research team conducted 607 interviews slightly exceeding the pre-defined sample size. The field survey was supplemented by several face-to-face interviews and focus group meetings in Kayseri and Hatay provinces.

- Data Processing and Analysis: For the data entry, as well as the data analysis, the Statistical Package for the Social Sciences (SPSS) was used.

Supply Study: The supply study provides an analysis of main players in the agriculture lending market and investigates the agricultural loan products, services and lending methodologies offered by these financial institutions. Primary and secondary sources were used to collect information and several interviews were organized with the major financial institutions in the market.

Gap Analysis: Based on the demand study and supply study conducted, a gap analysis was conducted and ways of filling the identified gaps and related recommendations suggested.

Value Chain Finance: Field interviews and client visits were conducted to investigate the current state and future perspectives of values chain finance in Turkey. In order to cover other stakeholders involved in a basic agricultural value chain e.g. input providers, processors, distributors etc., Frankfurt School applied interview techniques and held several one-to-one or focus group interviews with selected enterprises. By way of interviews, FS experts were able to collect more detailed information on needs of agricultural enterprises at different levels of agricultural value chains.
**Demand Side**

**Characteristics of Farmers**

**Gender**

Interviews were conducted with the decision maker in the respective farms. Only 3% of decision makers in the farms under consideration are women, showing that women are highly under-represented in the agricultural activities of the survey regions. Agricultural activities are almost exclusively managed by men.

**Age**

The survey shows that most of the decision makers in agricultural activities belong to the middle-age generation. The majority of respondents fall in the age range between 40-59 years with a mean value of 46.7 years.

**Education**

100% of respondents are literate. While the absolute majority of respondent (62.7 %) are primary school graduates, 6% do not have any formal education and only 3.3% have a university degree. Comparing the education levels of farmers with the country statistics in general shows that 9.7% of Turkey’s population have a university or higher degree and 22% are high school graduates. It can therefore be stated that the level of education in the agricultural sector is much lower than the overall level for Turkey.

**Size of Families**

As the definition of “family” is different in rural parts of Turkey (extended families including more generations than in the west coast region are typical) we asked the question of “how many family members do you support by farming income?” to identify the number of family dependents. The result is a mean value of 7.23 family members in surveyed regions. That is significantly higher than the Statistics for Turkey in general with an average family size of 3.89 (3.82 in cities and 4.13 in villages). Muş represents the largest families with almost 14 family members followed by Şanlıurfa and Mardin. Having largest families in Muş is not a surprise: Muş is ranked last among all regions in the social development index of Turkey’s provinces, and there is negative correlation between lower levels of social development and larger family size.

**Number of Household Members**

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Two conclusions are possible: either agriculture is not a preferred profession among higher educated people or farmers do not see the need / do not find an opportunity for higher education.

**Age and Education**

![Age and Education Chart]

Taking into consideration education levels according to age brackets of farmers, we see that all farmers up to 30 years have formal education. With increasing age, the number of respondents who don’t have any formal education also increases. That shows that the government’s policy to raise education levels has been successful and education levels among the younger generation are higher.
Registration Status

The survey shows that with 93.9%, the overwhelming majority of farms in the survey region are registered. Only 6.1% of farmers did not register their land or animals.

Size of Farms

538 of 607 respondents cultivate farm land. The average size of farm land in the survey region is 120.83 da or roughly 12 ha. 54.4% of farmers interviewed have less than 50 decares of land.

Characteristics of Farms

On the other hand, according to 2008 TURKSTAT statistics for the whole of Turkey, 78.9% of all Turkish farms are smaller than 100 decares and 69% of farms are smaller than in the survey regions. These farm sizes are much smaller than in the US (average farm size 169 ha) but roughly in line with average farm sizes in Europe (19.7 ha). Sharing inherited land among numerous family members is the main reason for smaller size of farms in Turkey. The conclusion is that although farm sizes in Regions III and IV are roughly in line with European farm sizes, they remain large compared to the average farm size in Turkey.

Farming Activities

Crop production is the dominant activity of farmers. 47.7% of respondents conduct only one form of agricultural activity. Whilst 33% have two different forms of agricultural activities, the remaining group of 19.3% conducts three or more different agricultural activities. Second or third activities are not necessarily conducted on a commercial basis. Covering the family's food needs might also be a reason of having additional farming activities.

Activities and Most Important Activities

39% of respondents are conducting crop production only and 8.9% do only animal production. According to TURKSTAT statistics for overall Turkey, 66.41% of agricultural entities are dealing with crop production in combination with animal husbandry, 33.56% are dealing only with crop production and only 0.03% are dealing with animal husbandry as a single activity. The survey shows that animal husbandry is a more important form of agricultural activity in regions III and IV compared to overall Turkey. Animal husbandry is the only feasible agricultural activity in some parts of regions III and IV due to harsh winter conditions.

Employment

The average agricultural enterprise in project regions employs 10.51 persons. Out of the total number of employees, 31% are family members. Seasonal workers are also counted as employed persons. As per TURKSTAT 2008 statistics, 41.5% of family members participate in agricultural activities. The survey shows that 45% of family members participate in agriculture activities. Thus, the involvement of family members in agricultural activities in the project regions is slightly higher than for Turkey overall.

The number of paid workers is highest in Kayseri (a very developed region) and Ordu (many migrant workers are employed during hazelnut harvest season), and lowest in Erzunum and Malatya.
What percentage of your total income comes from agricultural activities? (N=607)

Only 24.9% of respondents state that their farming income is sufficient to cover their living expenses.

Is your agricultural net income enough for living? (N=602)

Drilling deeper into the farming income data, the mean household income of the subgroup of those who can live solely off their farming income is significantly higher: 29,468 TL in 2010 and 34,057 TL in terms of own 2011 estimates.

Source: TURKSTAT

Diversification of income streams is low in the project regions. The majority of farmers focus exclusively on agriculture to support their families. 57.6% of respondents indicated that income from agricultural activities is the only income source of family households.

The mean household income from agricultural activities was TL 15,873 for 2010 and is expected to reach TL 17,664 for 2011. The outlook of agricultural activities among interviewees is rather optimistic. Farmers expect an increase of 11.3% in agricultural revenues in 2011 compared to 2010. This higher turnover might be a result of increasing food prices or increase in volumes of agricultural production.

Overall, farming income constitutes 81.3% of total income. It was already mentioned that 44.2% of farming households have additional sources of income. Those respondents most often had members of the household who also receive salaries (69%) or were engaged in other commercial activities such as retail trade (24%). Only 12.2% of respondents earn more from other income sources than their farming activities and other incomes should be taken as a base for the credit analysis of this particular group of rural population.

Irrigation

Although the government has been investing in irrigation via specialized programmes, levels of irrigation are limited. Only 39.2% of farmers indicate that all of their farm land can be irrigated. In addition, 23.2% of respondents stated that their farm land cannot be irrigated at all. According to the Turkish Ministry of Agriculture statistics, only 62% of the economically irrigable agricultural land in Turkey is currently irrigated. However, the government announced that irrigation investments will continue and the total irrigated area is planned to increase by 12% during the coming years.

What is the percentage of your land that can be irrigated? (N=538)

Machinery and Equipment

The majority of respondents experience a lack of machinery and equipment to meet their agricultural production needs. Only 28.4% of respondents state that they have sufficient machinery and equipment.

Use of Insurance

Use of agricultural insurance services is at a very low level among farmers. Only 16.8% of respondents use agricultural insurance products. When asked about reasons for not using insurance, high costs of the services and a lack of awareness for the need and benefits of such products were mentioned by most respondents.

Overall agricultural insurance uptake is very low. Only 16.8% of respondents use agricultural insurance products. The majority of farmers indicate that they do not use such products. However, the government announced that insurance investments will continue and the total irrigated area is planned to increase by 12% during the coming years.

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Source: TURKSTAT
96.7% of respondents indicate that they receive consultancy services from agricultural institutions. Chambers of agriculture and province/district directorates of agriculture are the most active institutions providing agricultural advice and 95.2% of farmers receive services from either institution. 74.6% of respondents receive advice from commercial banks and 71.7% from farming cooperatives. 34.4% of respondents indicate that they receive services from private consultancy companies.

When asked about the quality of services provided, the overwhelming majority of farmers express their discontent. It is interesting to see that satisfaction levels of farmers who receive consultancy services from private consultancy firms are the lowest. The group of farmers using services of private consulting companies might think that the quality of service does not match the money they pay for the services.

Assessment of consultancy services provided by:

Whilst 90.4% of respondents state that they need professional consultancy, only 36% are ready to pay for these services. There is a rather large group of enthusiasts (24.6% of respondents) who state that they would be ready to use consultancy services at any cost. The conclusion is that even if farmers are ready to pay significant amounts, it is not easy to receive professional and qualified consultancy services.

Farmers who sell their products to customers who can pay before the harvest season say that on average they would get 10.1% higher revenues if they could wait until after harvest season. When this rate is annualized, the price difference would be considerably higher than the bank’s interest rates. If farmers would have access to short-term financing sources they could sell products at significantly higher prices, making additional profits even after costs of bank loan.

What is your priority in selection of customers? (N=603)

The use of contractual sales agreements with buyers is currently at a very low level. Only 9.7% of farmers sell their products using contractual production.

To whom do you sell your agricultural product and/or animal production? (N=606)

When asked about the priority in selection of customers, respondents state that being paid in cash is more important than achieving higher revenues. Only 35% of respondents state that they can wait until they find the best offer or the timing of sales is not important.
Constraints

The analysis shows that sales price related issues constitute the most pressing challenges to farmers. 69.3% of farmers mention either low sales prices or not being able to estimate price fluctuations as the major constraint to their business. As already mentioned in the marketing and sales section, if farmers had access to financing sources they could sell products at better prices even after bank financing costs. Introducing value chain finance could further mitigate price related issues.

What are the most significant problems you / your enterprise faced while carrying out your business? (Multiple choices are possible) (N=605)

Future Perspectives

52.5% of respondents plan to increase their production capacity and / or diversify their agricultural activities in the years ahead. In effect, the majority of farmers are optimistic about the future, trust their businesses and are willing to invest if conditions allow doing so.

Among the respondents who indicated that they don't plan to increase activities, 60.5% stated that they don't have enough own funds to finance the investments needed. The data show that the use of own funds is perceived as the main source to potentially increase agricultural activities. If this heavy reliance on own funds, implying also an aversion against borrowed funds, could be overcome by efforts of financial institutions to build trust it can be expected that the share of farmers who are willing to invest in increasing and diversifying their business would grow.

4.7% of respondents claim that they don't want to take the risk of venturing into new activities. This group can be defined as farmers lacking entrepreneurial spirit and should not be part of the preferred target group of financial institutions.

What is your plan for the future? (N=568)

When asked about the future perspectives of agriculture in Turkey, 70% of respondents think that farming would improve or remain stable.
It was already emphasized that farmers consider “own funds” to be the main source of financing for their investment/expansion plans. Sources to finance working capital needs are not different: the vast majority of respondents indicate that they use only own funds for working capital needs. Only 15% of respondents use bank loans or other banking instruments to finance working capital needs.

Which of the following options do you use to finance working capital needs (purchase of animal feed, seeds, fertilizers, pesticides) of your farm or enterprise? (N=605)

- Own funds, 66.2%
- Loan from family/friends, 16.6%
- Bank loans, 15.1%
- Through selling my animals, 7.9%
- Loan from Agricultural Credit Cooperative, 6.9%
- Credit Cards, 2.6%
- Loan from Non-bank lender, 1.9%
- Farmer Card/ Producer Card, 1.2%
- Loan from Government, 0.5%
- Advance payment from companies providing inputs, 0.4%

Borrowing Perceptions

Among the main obstacles to obtaining a loan from a bank, lack of guarantee/collateral is ranked first. During focus group meetings, most farmers stated that banks provide loans only against mortgages, pledge of farm land and the like.

The fear of not being able to repay the loan is the second most important constraint. As most farmers do not have any borrowing experience, they might assume that loans are only provided with equal instalment repayment schedules which deny the marked seasonality of their business. Therefore farmers might expect not to be in a position to repay debt on time with their seasonal income. The lack of favourable terms and repayment conditions is another important constraint to bank financing.

However, farmers do not rule out bank financing altogether. 73.6% of respondents would take out a loan on favourable terms and conditions. High interest rates and commissions are also major constraints. However, in the marketing and sales section it was mentioned that receiving cash is more important than total revenue. Some farmers accept as much as 19% lower sales prices per season only to receive financing before the harvesting period.

In your opinion, what are the three most significant constraints in obtaining a loan from a bank? (607)

- Lack of guarantee/collateral, 23.6%  
- Fear of not being able to pay off, 20.0%  
- High interest rates, 17.1%  
- Lack of favourable repayment conditions, 16.6%  
- Lack of trust to banks, 14.8%  
- Bad credit history, 13.8%  
- Too long and too complicated procedures, 10.0%  
- Not being able to document agricultural activities, 8.9%  
- Lack of information, 7.7%  
- Lack of access to banks, 6.8%  
- Others, 4.6%  

Preference for Banks

The farmers interviewed in the course of this study prefer to work with state owned banks. Ziraat Bank appears very well entrenched indeed as the dominant player and preferred partner in agricultural finance. Brand recognition, client inertia and the expectation of access to subsidized government programs may all play a role in the remarkable preference for Ziraat Bank.
Key findings of the demand study

This study demonstrates that farming is a profitable business if it is professionally done and therefore rising numbers of entrepreneurs entering agriculture are expected in the coming years. This study also shows that farmers are not only potential loan clients but can potentially use other bank products as well. As 24.9% of farmers indicate that their farming income is enough to live, this group can be looked at as potential deposit clients.

One of the main conclusions of this study is that currently the presence of private banks in agricultural lending is almost nonexistent. Many farmers even do not consider bank finance as a source of funding and they tend to use their own capital for financing needs. Although only 24.9% of farmers state that their farming income is enough to live on, the majority of farmers are not pessimistic about the future of agriculture. Most farmers would like to expand and improve their business through investments, increasing production capacity and diversifying products and improving quality of products. However, the lack of access to finance is the main obstacle for those motivated farmers. Access to finance would also enable farmers to sell products at better sales prices even after accounting for bank interest.

Due to the operational cycle of agriculture, all farmers need working capital. Frankfurt School consultants calculated the average working capital need per decare for 11 sub-regions of Turkey in the course of the development of the CAP tool (client assessment tool for agriculture) as part of the EBRD Turkey MSME Lending Programme. The average working capital need per decare is lowest for the Bayburt – Erzincan – Erzurum regions in Turkey with a need of TL 116 per decare. Taking into account the average farm size of 120.83 decares and the 518 TL working capital need as a base, the working capital need per farm is estimated to be 62,160 TL in the project regions.

All interviewed banks regarding access to finance by farmers. Finance”. Collateral is highlighted as the major concern by interviewed banks as well. Better agricultural consulting services would also support access to finance, especially for more sophisticated products like project finance and green field investments.

This study focuses on the financing demand of entrepreneurs who are already in the sector. With improvement of lending procedures and development of new lending products, the sector would be attractive also for new investors.

Supply Side

Agriculture banking departments as separate divisions: Almost all commercial banks in Turkey provide loans to the agriculture sector. However, until recent years only Ziraat Bank had a separate agriculture banking department. Currently, a few private banks have separate agriculture banking departments. However, some banks are in the process of establishing a separate department and the remaining banks are studying the business potential of the segment. Banks which do not have a separate agriculture department carry out agriculture lending activities mainly under SME department. In some banks, the retail banking division is responsible for agriculture banking activities.

Definition of “Agriculture Client”: Currently most Turkish Banks define agriculture clients as producers (individuals or enterprises) in cropping and / or animal husbandry. Within defined client segments, some banks target to work only with farmers or agricultural holdings (both crop and livestock production) whose farm and holding size is higher than the averages in the respective region. Currently individual farmers and legal entities that are exclusively involved in the processing and / or trading of agriculture products are not regarded as “agricultural client”. These clients are mainly served by corporate and / or commercial banking departments.

Agri-lending Policies and Procedures: During interviews it was seen that banks which have a separate agriculture banking department have also a specific lending mechanism for assessment of agriculture loan applications. These banks have developed their own lending mechanisms to analyse income from farming activities. One private commercial bank is currently implementing a sophisticated agricultural lending assessment tool which focuses on agronomic and financial analysis of farmers and agribusinesses based on a comprehensive qualitative and quantitative analysis.

In general, banks which do not have a separate agriculture banking department do not have any specific agricultural loan assessment system either or use a very simple calculation model which is considered as a support instrument in loan allocation. In most cases, either banks’ retail or SME scoring system is applied in the assessment of agricultural loan applications.

Loan Products and Services Offered: All interviewed banks have various loan types to provide working capital and / or investment finance to farmers. Many banks have specific credit cards for farmers which cover working capital needs.

Acceptance of Collateral: Currently, Turkish banks mainly accept the following forms of collateral in agricultural finance:

- Land
- Guarantor
- House mortgage
- Vehicle (car and tractor)

In some banks, branch managers have the authority to determine the collateral coverage and define appropriate collateral. However, many banks ask for tangible collateral especially for long term loans.

Agreements with Chambers and Cooperatives: Recently banks started to expand agriculture lending activities through chambers and cooperatives. With a contract signed between agricultural institutions and banks, the latter’s provide agricultural loans with favourable conditions to these institutions’ members. In this way, banks pass on to their clients the cost advantages achieved by efficient marketing through the chambers and cooperatives.

Banks’ Opinion on Limitations and Obstacles in Agriculture Finance: During the interviews, banks were asked what they see as major “Limitations and Obstacles in Agriculture Finance”. Collateral is highlighted as the major concern by interviewed banks regarding access to finance by farmers. Hypothecated land, ethics and cultural issues, multiple ownership, land ownership, difficulties in appraising and cost of mortgage registration are some obstacles in accepting agricultural land as collateral. Subsidized loans, scale of farming: difficulty in monitoring loans, lack of entrepreneurial spirit, lack of education and farming knowledge and insufficient capital are also mentioned as major “Limitations and Obstacles in Agriculture Finance”. High input prices, an unclear pricing structure and price fluctuations, a lack of using insurance products by farmers, a sizeable informal economy and a lack of coordination in purchasing, production and marketing activities of farmers are mentioned as additional obstacles to financing the agriculture sector in Turkey.

Banks’ Opinion on Future of Agriculture Sector in Turkey: Bankers are aware of the strategic importance of agriculture and stated during the interviews that Turkey’s population growth and climate change require additional support to Turkey’s agriculture. Bank representatives stated that agricultural banking will be one of the key operation areas in the near future. The share of agriculture loans in GDP is expected to increase faster than that of any other sector. Some bank representatives state that if banks use a central agricultural lending mechanism to identify cost and income projections of agriculture clients, agriculture lending would be more effective and efficient.
GAP Analysis

This gap analysis highlights major discrepancies between the current actual business environment of farmers in the survey regions and their expectations of a business environment that would enhance the sustainability and success of their farming activities.

Low sales prices / price fluctuations: Marketing and sales are key issues for farmers in the survey regions. Whilst few farmers face problems with selling their products, most are forced to sell at unfavourable conditions because they act individually and are not organized in marketing cooperatives or farmers associations.

High input costs for seeds, fertilizers etc. are major challenges to improving the economic situation of farmers in the survey regions. Again, such challenges are the result of individual purchasing efforts of farmers. Pooling purchases of individual farmers in buying cooperatives and / or associations could improve purchase terms significantly, thus improving the economic conditions of each individual farmer.

Current government incentives / support are seen as insufficient by 83.2% of farmers. Interestingly, a much lower 41.5% of farmers see the lack of government incentives as a constraint to their business. However, the 41.5% is still a high percentage and their expectations should be taken into account for improving the current incentive system. Farmers think that crop finance, interest free loans, input finance and cash support per hectare of cultivated farm land should be the focus of future incentive schemes.

The demand analysis shows that the majority of respondents experience a lack of machinery and equipment to meet their agricultural production needs. 71.6% of respondents stated that their current stock of machinery and equipment is not sufficient for their business. When asked about the constraints to investment in machinery and equipment, 85.1% of respondents quoted lack of own funds as the major obstacle.

When asked about obstacles to obtaining a bank loan, lack of collateral is mentioned as a major constraint to business development. During structured interviews with the current key providers of agricultural finance in Turkey, banks stated that mortgages, farm land, guarantors and vehicles are the main collateral for agricultural loans.

The prevailing perception by farmers is that banks do asset based lending and do not pay attention to actual cash flows of businesses. Such negative reputation prevents a large group of potential borrowers from approaching banks.

High interest rates and commissions are other major constraints to farmers to consider bank financing.

However, notwithstanding the obstacles mentioned above, there is very high potential demand for bank finance, both for working capital and investment finance: Only approximately a quarter of respondents say they don’t need a loan at all. As many as 73% of respondents would take out a loan on favourable terms and conditions. The survey also shows that 45% of respondents are potential new borrowers. This particular market segment embodies huge growth potential for banks.

On the other hand, only 22.6% of interviewed farmers cite lack of funding for growth as a challenge to their business. When asked whether they ever tried to obtain a bank loan, only 40.1% of respondents gave a positive answer. Among these, a surprisingly large group of 70% actually received a loan. A very interesting picture emerges where banks in general provide the loans to those who apply for them but most farmers never applied for loans, relying on own sources instead, thus avoiding banks as sources of finance.

Lack of irrigation was mentioned by 20% of respondents as a major constraint to their business. For farmers experiencing a lack of access to water, high investment costs and financing irrigation systems seem to be the major challenges.

Use of agricultural insurance services is at very low levels among farmers (only 16.8% of respondents use agricultural insurance products).

The study analysed the interaction between farmers and agriculture service providers. 96.7% of respondents indicate that they receive consultancy services from agricultural institutions. However few businesses benefit from the consulting services provided. Most farmers state that agricultural institutions restrict their support to providing required application forms but do not provide business advice. In particular agronomic advice is missing.

Recommendations

To strengthen their market position, farmers should pool their marketing and also their purchasing efforts. Marketing associations or cooperatives of farmers will increase their market power via a vis the buyers and improve sales conditions and thus the financial position of the members. At the same time, farmers can share market information on prices and demand in order to sell at more favourable conditions. The same is valid for purchasing activities: by pooling their input purchases, farmers can improve their purchasing prices and improve their position vis a vis suppliers of seeds, fertilizers, etc.

Farmers should make more use of innovative instruments like contractual sales agreements to improve their sales conditions.

Private banks should be allowed to implement government support schemes next to Ziraat Bank which is currently the agent for most programmes.

In order to overcome the current lack of machinery and equipment experienced by farmers in the survey regions, farmers are encouraged to form machine / equipment ownership associations or cooperatives. Sharing the purchase costs of machines and equipment will decrease the investment cost per farmer whilst ensuring efficient use of modern machines and equipment by farmers, thus increasing productivity.

Private banks should broaden and deepen their approach to agricultural lending, offering the full financial product range on a mass scale.

Banks should develop and apply modern analytical tools and scoring models specifically designed to take into account the agronomic risk profiles of agricultural producers. Such comprehensive analytical approach to credit decision making should be more cash flow based than asset based, thus lowering collateral requirements to borrowers.

Applying value chain finance on a larger scale would also mitigate excessive collateral requirements by receiving guarantees of buyers or coordinating cash flow cycles between contractual parties.

Employment of loan officers in banks’ branches who are trained in agriculture lending process and also able to provide guidance to farmers in their production process would help banks to increase agriculture banking activities in a secured way.

Ziraat Bank is by far the most trusted bank in the survey regions. Private banks wanting to gain market share in agricultural finance are strongly recommended to build high levels of trust by applying sound business practices, careful relationship building and skilful customer communication.

Since collateral is one of the biggest obstacles in agriculture finance from both lenders and borrowers’ side, effective use of the Turkish credit guarantee fund (KGF) could potentially enable more agribusinesses and individual farmers to access banks’ finance.

Fears of non payment is an important factor that prevents farmers from taking loans. In order to improve the reputation of banks’ activities in the market, banks should follow generally accepted principles of responsible finance. Such principles of responsible finance include adequate foreclosure procedures as well as making informed and responsible credit decisions in the first place and thus avoiding over-indebtedness of borrowers who cannot repay loans.

Such principles should be part of corporate social responsibility policies of banks and actively communicated to the market.

Agricultural insurance services should be actively promoted by TARSIM, private insurance companies, Ziraat Bank, private banks, agricultural chambers, ministry of agriculture and other relevant bodies. The benefits of agricultural insurance coverage as well as the risks involved in not taking insurance should be communicated to the market more actively.

Agricultural consultancy services should be improved in terms of range of topics as well as quality of consulting provided.
Value Chain Finance (VCF)

A report prepared by Chemonics International Inc. for the Financial Sector Knowledge Sharing Project aptly describes VCF as the finance that flows to or among value chain members, including the smallest micro enterprises and the largest multinational company. VCF may be direct or indirect. Direct VCF refers to financial flows between value chain actors. For example, a processor may provide cash or in-kind credit to a small farmer producing apricots for the company. The credit is repaid when the apricots are delivered to the processor. Indirect VCF refers to lending by a financial institution (e.g., a non-governmental organization, credit union, or bank) to a value chain member. Some successful approaches to value chain financing are actually a hybrid of the two.

VCF seems to be particularly suited to developing lending markets where financial institutions want to increase lending to a particular sector but do not have the necessary expertise or confidence to proceed with traditional lending practices.

The Turkish Financial Sector and VCF: The Turkish financial sector functions to a very high international standard and is much more sophisticated and transparent than many other financial sectors in developing countries. However, certain similarities are evident:

- Turkish banks are interested in increasing their agricultural loan portfolio
- Turkish commercial banks do not have much experience with agricultural lending
- Farmers are reluctant to borrow money from banks mainly due to complicated and inefficient procedures but also due to a lack of trust in the system
- Turkish farmers have well established relationships with processors and pre-finance agreements are common in some sectors
- Difficulties in using agricultural land as loan collateral

In Turkey, agricultural lending by commercial banks is a developing market which seems very well suited to the implementation of VCF initiatives.

Current Situation: The links between farmers (suppliers) and processors are very strong. All of the processors visited pre-finance their suppliers through the provision of inputs such as finance, seedlings, fertilizers and TA. The payment for those inputs occurs at delivery time, when processors deduct the value of the inputs from the price of the delivered produce. It was unclear from the discussions however what interest rate is applied to these inputs.

This system leaves farmers vulnerable to exploitation as it is up to the processor to determine how much interest they will charge for inputs provided especially since farmers are tied to them through delivery agreements. It can be assumed, but this is not necessarily a fact, that processors treat their suppliers fairly since they depend on each other and the competition in the processing industry is increasing.

The farmers interviewed clearly stated that they prefer to receive pre-finance from their processors over receiving loans from the banks. Processors confirmed that their suppliers prefer working directly through them. Both farmers and processors say that the strong business relationship is based on trust and open communication.

Possible applicable VCF Finance models in Turkey are as follows:

VCF in the “Buyer Driven Model”: VCF in the form of buyer driven models already exists in Turkey to some extent. In fact, banks giving loans to processors who then on-lend to farmers through the provision of inputs could be regarded as a simple model of VCF. However, a VCF model based on farmers receiving loans from banks (on clearly defined interest rates) is not common in Turkey. In such a model, farmers can use loans to produce their crops. Off-take agreements with processors can serve as collateral if collateral is insufficient otherwise.

VCF in the “Client Driven Model”: Whilst the conducted survey focused mostly on VCF in the “buyer driven model” there exist other VCF concepts of interest to the Turkish agricultural sector. VCF in the “client driven model” is of particular potential and is briefly outlined in the example below.

Small and medium scale farmers in Turkey can be structured for the pooling of resources which will enable them to finance capital investments, such as machinery and equipment which would not be affordable for individual farmers. In doing so, the suggested model will allow farmers to gain access to a new type of financing which is not currently offered through direct VCF provided by processors in Turkey.