DISTINCTIONS OF THE CROWDFUNDING MODEL IN AGRICULTURE

Natal’ya G. FILIMONOVA
Krasnoyarsk State Agrarian University (KrasSAU), Krasnoyarsk, Russian Federation
natali_f08@mail.ru

Mariya G. OZEROVA
Krasnoyarsk State Agrarian University (KrasSAU), Krasnoyarsk, Russian Federation
ozerova_m71@mail.ru

Irina N. ERMAKOVA
Krasnoyarsk State Agrarian University (KrasSAU), Krasnoyarsk, Russian Federation
irena-erm@rambler.ru

Abstract

Importance The article studies organizational and economic aspects of crowdfunding intended to finance agricultural projects. We provide methodological recommendations for designing and implementing the crowdfunding scheme in rural areas.

Objectives We outline methodological recommendations for building a crowdfunding model to finance innovative and investment projects in line with sectoral distinctions of agriculture.

Methods The research is based on general scientific methods of analysis and synthesis, statistical and analytical data on performance results of crowdfunding platforms.

Results We unfold distinctions of the crowdfunding model applied to agricultural projects, and provide our advice on the way agricultural projects should be pitched.

Conclusions and Relevance Being a promising tool to raise the finance of innovative and investment projects in agriculture, crowdfunding has its sectoral distinctions to be considered in order to select a crowdfunding model and arrange project presentation stages. Our recommendations can prove useful for agricultural producers and other entrepreneurs to select an appropriate crowdfunding model of innovative and investment projects in agriculture.

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Creating a stimulus for investment is one of the priorities pursued by the economic mechanism of the agricultural sector. The 2013–2020 governmental program for agricultural development and regulation of agricultural markets comprises the interim program, Technical and Technological Retrofitting and Innovative Development, which triggered technological retrofitting of enterprises, increase in variety selection plantings, use of modern holistic technologies of agricultural production, and drew the finance into large investment projects in animal husbandry. However, investment projects have not gained momentum due to insufficient financial aid of the State. According to I. Ushachev, A. Serkov, V. Maslova and V. Chekalin, public investment fell from RUB 9.1 billion (2010) down to RUB 8.7 billion (2015) [1].

Profit and loans still remain the main feed for most agricultural producers in Russia. Fundraising volumes grew by 12.3 percent in comparison with 20101. As the State subsidizes interests rates, thus making loans more affordable, the financial position of agricultural enterprises changes. First, it increases the percentage of bank loans in current assets. Second, it reduces a share of equity in assets.

As agricultural enterprises raise more external funds, they figure out that there are not enough credit institutions in the market. Currently, Russian Agricultural Bank and Sberbank serve about 78.5 percent of loans borrowed by agricultural entities.

Alternative finance may well become a good option in this case. Public finance, or crowdfunding, is one of such options.

Researchers of crowdfunding regard it as a type of crowdsourcing, i.e. using general public’s resources and information technology to support business, State or society on a voluntary basis. Such views can be found in proceedings by J. Howe, S.R. Sedel’nikov, A.N. Sivaks [2–4].

As J. Howe [2] and N.A. Larionova [5] put it, crowdfunding essentially constitutes project or business finance by persuading many people to make donations generally via the Internet.

A rise of crowdfunding is also mirrored with growing numbers of crowdfunding platforms. According to Massolution’s research, in 2010, there were about 200 websites, where business initiatives managed to totally raise USD 854 million. In five years there were 1,250 crowdfunding websites with donations totaling USD 34.4 billion. The crowdfunding industry is forecast to double in its volume, reaching USD 96 billion2.

Major crowdfunding websites pertain to the United States of America. Entrepreneurs from any country may pitch or support projects and business interests there as beneficiaries or backers respectively. They can do this on their own or through a representative. For example, Kickstarter unites over 12 million people who successfully support more than 120 thousand creative projects, with the finance approximating USD 3 billion.

Kroogi pioneered the Russian market of crowdfunding platforms in 2007. It was founded by leaders of Planeta.ru and Boomstarter. Modeled like the U.S. platforms, they provide a great deal of methodological guidelines for new users to succeed in crowdfunding endeavors.

Specialized platforms for agricultural ventures have been emerging for recent years. Barnraiser and AgFunder are the leading ones.

There are no special platforms for agricultural businesses in the Russian market yet. However, crowdfunding gains momentum as a source of finance for startups and innovative projects in agriculture. It is enough to look at growing amounts of funds raised on the largest Russian crowdfunding platforms (Boomstarter, Planeta.ru). For instance, in 2014 agricultural projects accounted for two percent of the total amount pledged by backers on the Boomstarter website. In 2015, their share grew up to four percent, with total donations of the platform increasing as well (RUB 53,251,515 up to RUB 91,134,989)3.

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As formulated by V.A. Tegin, B.F. Usmanov, D.Yu. Boldaruk, I.I. Boldaruk, the modern crowdfunding model comprises three fundamental parties, i.e. project initiator suggesting the idea to be financed, certain persons or groups who back the idea, regulatory organization (crowdfunding website) acting as an intermediary [6, 7].

K. Wenzlaff, M. Wallhauser, D.E. Guseva and N. Malykhin classify crowdfunding by type of rewards, which are applicable to agricultural projects as well [8, 9]:

1) *charity*. Those who donate are not supposed to receive any reward for their contributions, or token rewards are given (gratitude, special mention in the mass media or on the website). In this case, the crowdfunding website accumulates pledges of backers and transfers them to the project initiator. This type of crowdfunding is intended to support socially important projects, like the construction and repair of social infrastructure facilities in rural areas, assistance to rural community clubs, care facilities, medical ventures, etc.;

2) *conventional crowdfunding*. It is one of the most popular methods of crowdfunding in all industries, from IT to film production. In exchange for financial aid, agricultural producers usually offer to supply their products positioned as ecologically safe or unique on the preliminary order basis. Beneficiaries may also allow their backers to stay on the farm for several days, participate in crop harvesting, or present them a collection of receipts, etc. As part of this crowdfunding strategy, websites can act as a conduits of rewards. The specifics of such rewards is investigated in proceedings by D.A. I'llenkova, A.Yu. Duk, M.D. Dzhamaldinova [10, 11];

3) *crowdinvesting, or equity-based crowdfunding*. Backers get a share or an interest in the company’s profit. This crowdfunding strategy resembles conventional investment models most of all. It was legally approved and promoted after U.S. President Barack Obama signed the Jumpstart Our Business Startups Act in April 2012, which permitted small investors to get a share or an interest in the company’s profit. Hence the agricultural entrepreneur can derive the best options notwithstanding some possible yield the project initiators may derive.

Various technologies, products and types of activities facilitate all types of crowdfunding in agriculture. However, sectoral distinctions of agricultural production shall be taken into account in choosing a certain crowdfunding strategy. According to Yu.V. Davydova [14] and B.I. Smagin [15], they influence the performance of agricultural business as a whole.

Fig. 1 depicts factors that determine which crowdfunding strategy should be selected, and what distinctions of agriculture contribute to them.

*Social Impact*. If the project delivers a socially comprehensible result, that is, products or services the society needs, workplaces in a decaying village and so on, charity and conventional crowdfunding will be the best options notwithstanding some possible yield the project initiators may derive.

*Project Scale*. Following the underlying crowdfunding principle — *many a little makes a mickle*, project initiators may well raise quite substantial finance from smaller investors. However, in practice it mainly works for projects in the most popular industries, which are interesting for mass consumption (music, cinema, literature, digital technology). Agriculture follows another path. Production and consumption are more often than not of local nature, being interesting only for those consumers who are geographically close to get a full reward (fresh products) and sense the social effect of the project. Hence the agricultural entrepreneur can hardly ever gather considerable funds to implement large investment projects, counting on conventional crowdfunding only or even debt crowdfunding. In case of large projects, they’d better opt for crowdinvesting and engage professional investors instead of numerous smaller ones.

*Profitability of Project and Return on Investment*. This is another metric we urge to consider when choosing a crowdfunding strategy in agriculture. If the business is estimated to generate less profit than the average in the industry, the project can hardly lure respectable
investors, who aspire dividends or interests in profit. In this case, traditional crowdfunding with non-monetary rewards seems to be an appropriate choice. If project profitability is in the mid range (in comparison with competitive types of business), debt crowdfunding will be more reasonable.

Therefore, agricultural entrepreneurs shall thoroughly match the project metrics and economics and key criteria of crowdfunding strategies and advisable scope of the project (Fig. 2).

After the project initiator chooses the most suitable format of fundraising, another issue comes out. They need to decide on what platform the project will be grounded. In this respect, popularity of a crowdfunding website is not the single option to mind, but it is the model of finance that matters.

We enumerate below the main models of fundraising seen in crowdfunding platforms. According to the all-or-nothing scenario, the project initiator gets pledged money only if the project reaches the target amount. Otherwise, money is returned to backers. As per the take-it-all scenario, project initiators may take pledges, net of the platform’s fees, no matter whether the project gather the declared amount or not. Some platforms combine these models, thus enabling project initiators to choose between two models, while the crowdfunding website adjusts respective fees in line with the extent to which the project attains the financial goal (Table 1).

Resorting to different finance models, crowdfunding business parties evaluate benefits and opt for a certain crowdfunding website.

In the mean time, not every project pitched on websites is necessarily successful. This may be due to the fact that designers rely upon a classical project technology and fail to consider distinctions of the crowdfunding campaign stages. We summarize advice from the leading international and Russian crowdfunding websites and highlight those distinctions.

**Setting the Project Goal.** The goal should be clear not only for the designer, but also for the public. Goals are often vague and imprecise, i.e. rehabilitation of a farm, recovery of a rural area, development of environmentally friendly production, etc. The goal shall reflect the reason for fundraising, that is the creation of a new product, the construction of an asset, arrangement for an event, etc. Whereas the target amount proceeds from a crowd, the project initiator should formulate the goal in an original, attractive and flamboyant manner. The goal shall pursue public interests, rather than personal and business ones only. If the project is expensive, it is reasonable to use the deferred goal technique. The project is split into stages, with the goal being set at the initial stage and vital for the project.

**Assessment of Financial Needs for Attaining the Goal.** The final declared amount usually consists of four components, i.e. the project value, fees of the crowdfunding website and payment systems, costs of rewards to be created and dispatched, taxes.

The project value shall include all costs associated with the idea. However, keeping the budget as low as possible is perceived as the main financial task. In 2016 the average value of an initial agricultural project was RUB 440 thousand on Boomstarter, RUB 309 thousand on Planeta. The record high pledges reached RUB 1 million on Boomstarter (FoxWood project) and RUB 690 thousand on Planeta (LavkaLavka project). As crowdfunding websites advice, ambitious financial goals are justifiable and feasible if the project has at least two qualities below:

- the project conforms to the current trends, resonates with people and has intense information coverage;
- the project author is encouraged by many loyal supporters (investors) who are interested in the project performance;
- repeated project initiated by the author who proved to be competent and trustworthy in the first crowdfunding campaign, demonstrated a reasonable use of raised funds.

If the project succeeds in collecting a sufficient amount of pledges, crowdfunding platforms charge fees on the amount (Table 1). Assessing costs of rewards for investors is the most difficult task at this stage. Project initiators make their own estimates, considering how many rewards are promised and how much they cost. Rewards shall not be a burden for the project since.


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the primary goal is to raise funds. To avoid unexpected expenses, many project initiators set up a limit of rewards, thus making them more valuable. Estimating rewards, project initiators should also include delivery costs into the budget, if rewards are supposed to be delivered.

Resultant pledges remitted to project authors are qualified as income and subject to taxes. An individual, who is a resident of the Russian Federation, shall pay the personal income tax as much as 13 percent, while individuals, who are not residents of the Russian Federation for tax purposes, are charged a 30 percent tax. If the project is pitched by an individual entrepreneur or legal entity, tax payments are assessed in line with the tax treatment applied to them.

The resultant amount comprises all the funds required to perform the project, fees of crowdfunding platforms and payment systems, costs for rewards and tax expenses. The final amount is the financial goal of the project. According to R.A. Dolzhenko, V.V. Ivanov, N.B. Sashenkova, the efficiency of a crowdfunding project can be defined as the ratio of the project target and crowdfunding costs [16, 17].

Project Timelines. There are two types of timelines in crowdfunding. The first one is the period planned for the accomplishment of a business idea. As investors need to understand how their pledges are spent, crowdfunding projects are short-term, lasting from six to 12 months. If a big project is concerned, it shall be phased and have a budget. The second term is the period planned for a crowdfunding campaign. As the leading crowdfunding platform recommend, 30–60 days make an optimal time to raise funds. Protracted crowdfunding campaigns (over 50 days) are less successful than shorter ones.

The project promotion begins with pitching the project on the crowdfunding website. The project profile usually features a description and video message. Addressing the target audience and investors, project initiators form communication tools which are relevant to each particular group. As stated by M.S. Kalinina [18] and S.V. Pozdynyakova [19], such tools vary, ranging from liaison with the mass media, applying to the sectoral leaders for support, mailout, participation in fora, exhibitions and conferences, etc. However, a special focus is put on the project page in social networking media.

Social media are currently regarded as interactive multi-user portals, which not only enable users to communicate, but also unite them according to their interests and needs, thus becoming a pipeline of would-be sponsors. According to E. Mollick, the number of followers the project author has in social networks is not the only thing that matters. The followers should be willing to support the project by reposting its announcement [20]. Table 2 presents key indicators of social activities influencing the outcome of a crowdfunding campaign.

Crowdfunding Campaign Close. Assessing the project at the end of the crowdfunding campaign, project initiators determine the congruence of results with the underlying idea, identify positive and negative aspects and adjust the project, if appropriate. The successful completion of the crowdfunding campaign opens the initial stage of the project performance. At this stage of crowdfunding, project initiators come across another requirement to meet. They have to report on the project completion through their personal accounts in social networks, project website, thus maintaining sponsors’ confidence, and securing future projects.

As a conclusion, we shall note that crowdfunding can be an effective tool to implement various projects in rural areas (innovative, environmental, social, etc.). However, like any other method of finance, it has drawbacks and challenging points. Hence it requires thorough planning and elaboration of all its stages.

\[\text{Kraufdancing na baze nefinansovogo voznanagrzdheniya: Kickstarter vs Indiegogo}\]

Kickstarter vs Indiegogo [Crowdfunding based on non-financial rewarding: Kickstarter vs Indiegogo].

URL: http://crowdsourcing.ru/article/kraudfanding_na_baze_nefinansovogo_voznagrzdheniya_kickstarter_vs_indiegogo (In Russ.)

<table>
<thead>
<tr>
<th>Website and location</th>
<th>Commencement</th>
<th>Project Theme</th>
<th>Finance Volume</th>
<th>Finance Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kickstarter (USA)</td>
<td>2009</td>
<td>Art, games, journalism, technology</td>
<td>Over USD 3 billion</td>
<td>The <em>all-or-nothing</em> scheme of finance. Payments include the platform charge (5 percent of the project pledges), payment system's charges. Projects are subject to moderation. The designer retain the title for the project, with environmental business ideas and projects being a priority. Projects for production of genetically modified organisms are not allowed.</td>
</tr>
<tr>
<td>Indiegogo (USA)</td>
<td>2008</td>
<td>Art, games, education, policy, technology, healthcare, traveling, fashion, charity</td>
<td>Over USD 1 billion</td>
<td>The flexible scheme of finance allows to choose the <em>all-or-nothing</em> or <em>take-it-all</em> scenarios. There are no geographical restrictions for finance. Payments include a 5 percent charge for the platform use, 3 to 5 percent charge of Pay Pal, 25 USD for money transfers outside the USA. Types of projects are unlimited.</td>
</tr>
<tr>
<td>Crowdfunder (United Kingdom)</td>
<td>2010</td>
<td>Art, sports, education, technology, business, politics, charity</td>
<td>Over GBP 33 million</td>
<td>The <em>all-or-nothing</em> finance. Payments include a 5 percent charge, Value Added Tax (20 percent of pledges), charge for the platform use, charge of Pay Pal (3.4 percent), transfer charge (GBP 20). Projects are limited. The project initiator commits themselves to rewarding its financial backers.</td>
</tr>
<tr>
<td>Planeta (Russia)</td>
<td>2012</td>
<td>Art, literature, fashion, journalism, science, society, social entrepreneurship, technology, charity</td>
<td>Over RUB 600 million</td>
<td>The flexible finance scheme allows to choose between <em>all-or-nothing</em> or <em>take-it-all</em> scenarios. Under the <em>all-or-nothing</em> scenario, payments include a charge for the platform use as much as 10 percent of the project pledges. Under the <em>take-it-all</em> scenario, the project initiation is to pay a 15 percent charge provided the project gathers from 50 to 99 percent of the declared value. Tangible or intangible rewards are obligatory.</td>
</tr>
<tr>
<td>Boomstarter (Russia)</td>
<td>2012</td>
<td>Art, sports, technology, games, design, fashion, charity</td>
<td>Over RUB 300 million</td>
<td>Pledges are collected on the <em>all-or-nothing or up-to-target</em> basis. Payments include a charge for the platform use as much as 5 percent of the project pledges, a 5 percent charge of payment systems, personal income tax. The project designer retains the title. Backers receive rewards.</td>
</tr>
<tr>
<td>Agfunder (USA)</td>
<td>2013</td>
<td>Agriculture</td>
<td>Over USD 34 million</td>
<td>Companies undergo a verification process, with the priority given to technological projects of high value added. A special back-up fund is formed for each project (AgFund), with the minimum investment of USD 10 thousand.</td>
</tr>
</tbody>
</table>

*Note.* The amount of finance is specified as of February 1, 2017.

*Source:* Authoring, based on the overview of crowdfunding platforms.
Table 2
Social activity factors influencing the crowdfunding campaign success

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Average parameters of Top 3 representing agricultural projects on the Russian crowdfunding platforms in 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planeta</td>
</tr>
<tr>
<td>The project initiator's number of followers in social networks:</td>
<td></td>
</tr>
<tr>
<td>Facebook</td>
<td>1,056</td>
</tr>
<tr>
<td>Vkontakte</td>
<td>633</td>
</tr>
<tr>
<td>Pieces of news and updates in the crowdfunding campaign account in social networks</td>
<td>3</td>
</tr>
<tr>
<td>The number of comments</td>
<td>12</td>
</tr>
<tr>
<td>Shared in Facebook</td>
<td>35</td>
</tr>
<tr>
<td>in Vkontakte</td>
<td>–</td>
</tr>
<tr>
<td>The number of sponsors/backers</td>
<td>72</td>
</tr>
<tr>
<td>Total pledges, thousand RUB</td>
<td>439</td>
</tr>
</tbody>
</table>

Source: Authoring, based on the overview of crowdfunding platforms

Figure 1
Sectoral distinctions and key criteria for choosing the crowdfunding strategy in agriculture

Source: Authoring
Figure 2
The comparative characteristic of crowdfunding types in accordance with key selection criteria

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Charity</th>
<th>Conventional</th>
<th>Debt crowdfunding</th>
<th>Equity-based crowdfunding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social effect</td>
<td>High social impact. Project addresses critical social issues in rural area</td>
<td>Project has both commercial and social effects</td>
<td>Project is commercial but has a social effect</td>
<td>There may be no social effect</td>
</tr>
<tr>
<td>Project scale</td>
<td>Project may be of any scale but smaller and medium-sized projects are preferable</td>
<td>SME projects</td>
<td>Medium-sized and large projects</td>
<td>Large projects with R&amp;D organizations</td>
</tr>
<tr>
<td>Project Profitability</td>
<td>Zero or low profitability</td>
<td>Low or medium profitability</td>
<td>Medium or high profitability</td>
<td>High profitability</td>
</tr>
<tr>
<td>Scope</td>
<td>Social and infrastructure projects in rural area</td>
<td>Green and unique products, productive innovations</td>
<td>Projects for farm construction and retrofitting, production expansion, substitute innovation</td>
<td>Technological innovation, projects in variety selection, genetic engineering, precision agriculture, smart farming</td>
</tr>
</tbody>
</table>

Source: Authoring
References


4. Sivaks A.N [Crowdfunding as a special type of crowdsourcing]. Vestnik Samarskogo gosudarstvennogo ekonomicheskogo universiteta = Vestnik of Samara State University of Economics, 2015, no. 11, pp. 30–34. (In Russ.)


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