Combine harvester operator, Shiunovo village, Altay Krai, Eastern Siberia (one of Russia's major grain producing regions), May 2011. Oxfam / Lyubov Shchanova

# AFTER THE DROUGHT

## The 2012 drought, Russian farmers, and the challenges of adapting to extreme weather events

**Extreme weather events are becoming increasingly common in Russia, and the 2012 drought confirmed this trend. However, Russia still has only a small number of specific agricultural adaptation measures in place. This case study analyses the key difficulties that small-scale farmers faced as a result of the 2012 drought and discusses possible adaptation measures, which could be used to confront these. It argues that climate change and the absence of adaptation policies are creating food security problems and a livelihood crisis for small-scale farmers. Specific and well-designed adaptation policies could significantly ameliorate the problems faced by the Russian agricultural sector, and must be introduced as soon as possible.**

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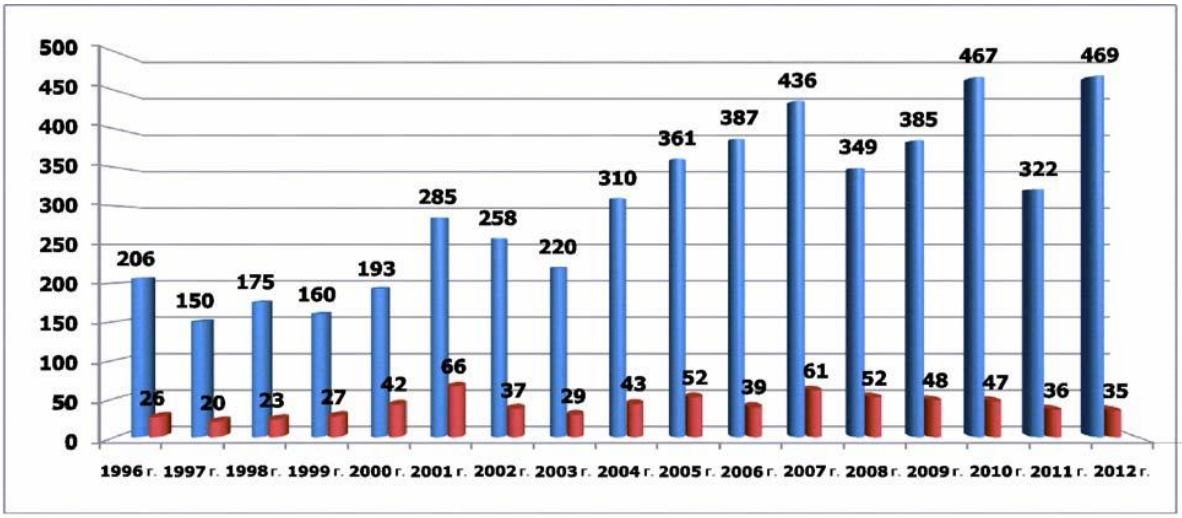
# 1 INTRODUCTION

**Extreme weather events are becoming more and more common in Russia.** The 2012 summer drought, which came so soon after the devastating drought of 2010, is just one confirmation of this trend. According to the 2012 annual report of the Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet),[1] 2012 saw a record number of extreme weather events (Figure 1). In the period May to June 2012, the number of extreme weather events increased by 65 per cent compared with the same period in 2011, and were roughly on par with the number of events that occurred in the same period in 2010.[2]

**Figure 1: Number of extreme weather events by year, 1996–2012[3]**

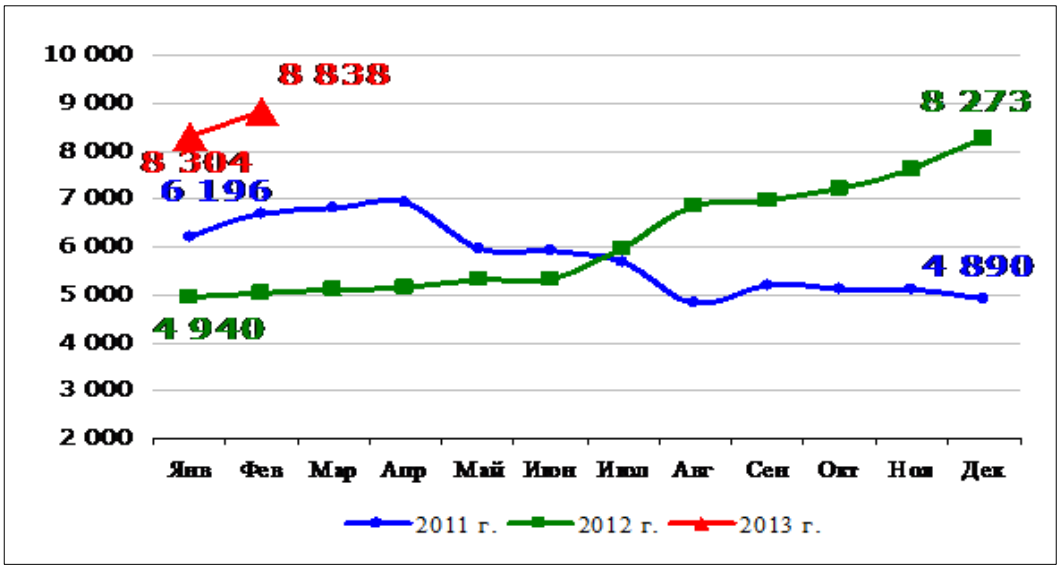



Blue: predicted events; red: unpredicted events.

What is especially worrying about this trend is how vulnerable and unprepared for such extreme weather conditions the Russian agricultural sector appears to be. In 2012, officially, 22 regions suffered crop losses, with a state of emergency declared in 20 of these.[4] The losses incurred were very significant: the year's gross grain harvest was 70.9m tonnes, 24.7 per cent lower than in 2011 (94.2m tonnes).[5] As well as grain, there were decreases in production volumes for sugar beet, sunflowers, potatoes, and vegetables.[6]

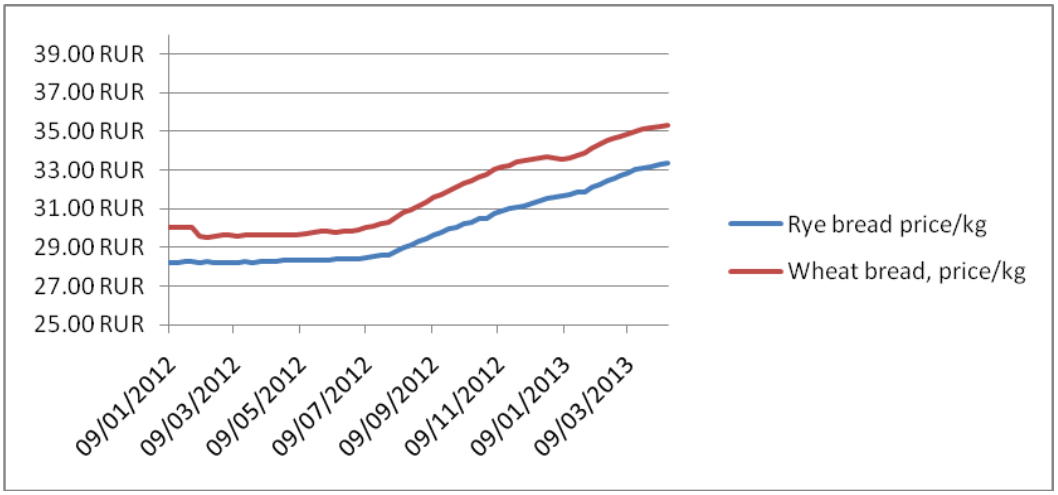
These crop losses had at least two negative socio-economic effects that are already known about. First, the domestic price of grain and, consequently, of bread skyrocketed (Figures 2 and 3). The results of Oxfam's qualitative monitoring of the social impacts of food price volatility indicate that this has already had negative effects on poor people in Russia.[7]

**Figure 2: Wholesale grain prices, 2011–13**[8]




Vertical axis: RUR/tonne; horizontal axis: months January–December

**Figure 3: Rye bread and wheat bread prices, 2012–13**[9]




Second, these losses have caused significant direct and indirect economic damage to farmers in the affected regions, making more farms unprofitable and pushing some to the verge of bankruptcy.[10]

Learning about the experiences of affected farmers is key to designing and implementing effective policies that could better enable the Russian agricultural sector to prepare for, and adapt to, extreme weather events – including droughts, which, unfortunately, are increasingly becoming the 'norm' in Russia.

**Box 1: Policy context – agricultural adaptation policies in the Russian Federation**

Currently, Russia's adaptation policy framework is based on just two documents – the Climate Doctrine of the Russia Federation, adopted in 2009,[11] and the Implementation Plan of the Climate Doctrine, adopted in 2011.[12] The Doctrine recognizes the impact of climate change and extreme weather events on different sectors of Russia's economy, including agriculture, and sets out a general framework for adaptation and mitigation policies. The Implementation Plan outlines key activities, responsible executive authorities, and implementation timelines for those activities. Two of the 31 activities listed in the Implementation Plan concern adaptation for the agricultural sector:

1) 'Mitigation of risk of agricultural production decreases (including decreases in livestock productivity, and in productivity and yield of crops) through the development of a method of calculation of risks and damages from climate change; and development and implementation of a system of agricultural adaptation measures';

2) 'Optimization of operations in the forestry and agricultural sectors, including stimulating activities related to implementation of agricultural adaptation measures'.

The Implementation Plan does not go any further in describing the nature of the activities. According to the timeline outlined in the Plan, the development of a system of agricultural adaptation measures is currently in its initial stages, and this system is expected to be in place by 2020.

As a result there, at present, very few agricultural adaptation measures in place. Moreover, as a number of experts have pointed out, 'the lack of financial and human resources support for the implementation of the Climate Doctrine [...] reflects a low sense of urgency over adaptation to climate change.'[13]

The aims of this case study are to analyse the key difficulties that small-scale farms faced during and after the 2012 drought, and to discuss possible adaptation measures that could mitigate the negative effects of such weather events on the Russian agricultural sector in future. The focus on small-scale farms has been chosen intentionally. As shown in Oxfam's report 'The Adaptation Challenge: Key issues for crop production and agricultural livelihoods under climate change in the Russian Federation',[14] these farms find climate change adaptation particularly challenging due to a lack of human and financial resources, and a lack of support from regional and federal governments. Small-scale farms also contribute significantly to Russia's food security, accounting for more than 53 per cent of gross agricultural product and 57 per cent of all crops, while occupying just 27 per cent of all cultivated land.[15]

**Box 2: Small-scale farms – a definition**

In the context of this paper, 'small-scale farms' include both farms that have the legal status of small-scale enterprises (whose activities are regulated by Federal Law 209 of 24 July 2009, 'On development of small and medium scale business in the Russian Federation'[16]) and family/subsistence farms (*lichnoe podsobnoe khozyaistvo*, whose activities are regulated by Federal Law 112 of 10 July 2003, 'On subsistence farms'[17]). The former category includes farms engaging in commercial activities, with no more than 100 employees and total income not exceeding RUR 400m (£8.3m) a year. The latter category includes 'non-commercial' farms managed by individuals and their family members that are used primarily for subsistence purposes.

This paper is based on an analysis of secondary data and the results of a qualitative study carried out by Oxfam and its partners in February to March 2013 with the participation of 56 owners and employees (38 men and 18 women) of small-scale farms in six regions affected by the 2012 drought (see Appendix 2). Four of the regions examined – Altai, Volgograd, Rostov, and Stavropol – were regions where an emergency situation was declared. In the other two regions – Astrakhan and Penza – the situation during summer 2012 was critical but no emergency was declared.[18]

# 2 BACKGROUND

## 2.1 LOSSES

According to estimates from the Ministry of Agriculture, 9,437 farms across those regions where an emergency was declared incurred losses as a result of the 2012 drought.[19] It is important to note that in most of the affected regions, family/subsistence farms were not taken into account at all when losses were calculated. More than 40 per cent of the 9,437 affected farms were located in the four regions where Oxfam conducted its research.

Direct losses estimated by regional governments amounted to RUR 21bn (£438m).[20] Direct losses reported by the federal government after an expert evaluation were RUR 14.2bn (£294m).[21] The Minister of Agriculture told parliamentarians that the gap between the regional and federal estimates was because federal experts used inadequate evaluation methods.[22] This led to lower levels of compensation being awarded. Also, direct and indirect losses combined were estimated by the regions at RUR 45bn (£937.5m), but indirect losses were not taken into account when compensation was allocated. Whichever figures for estimated losses are accepted, it seems that the actual losses incurred by farmers far exceeded them. This is supported by data on crop revenue losses recently released by Rosstat, the Federal State Statistics Service.

Information from open sources on losses in the regions where no emergency was declared is quite scarce, so it is difficult to estimate the extent of damage caused by the drought in those regions, and especially the number of farms affected. However, from the data available on crop revenue losses (Table 1), it is clear that the situation in those regions was, indeed, somewhat less critical than in regions where an emergency was declared.

**Table 1: Affected regions and extent of economic damage[23]**

| Region | Number of affected farms | Affected area, hectares | Official estimates of direct losses incurred as a result of 2012 drought, RUR thousands | Difference in crop revenue 2011/2012 (at constant prices*), % | Potential crop revenue losses for 2012 (at constant prices*), RUR thousands |
|---|---|---|---|---|---|
| **All Russian regions** | **N/A** | **N/A** | **N/A** | **88** | **204,414,500** |
| **20 'emergency' regions** | **9,437** | **5,500,354.38** | **14,211,860.13** | **73.9** | **167,315,478.6** |
| Altai region | 2,077 | 719,891.38 | 1,193,093.55 | 73.9 | 12,180,791.7 |
| Volgograd region | 1,584 | 540,704.2 | 1,565,131.56 | 87.2 | 6,465,139 |

| | | | | | |
|---|---|---|---|---|---|
| Rostov region | 355 | 90,037 | 249,518.44 | 84.5 | 15,032,287.5 |
| Stavropol region | 160 | 71,066.43 | 219,858.44 | 72.0 | 20,359,052 |
| Astrakhan region | N/A | N/A | N/A | 106.6 | -771,665.4 |
| Penza region | N/A | N/A | N/A | 96.9 | 608,381.2 |

* Constant prices, according to the methodology used by Rosstat, are the prices of the previous year, in this case, 2011.[24]

# 2.2 COMPENSATION

Appeals for support from the regions had already begun in early summer 2012,[25] and the official damage estimate was completed in early October. At the end of November 2012 the federal government allocated an additional RUR 6bn in support to affected regions, disbursed to regional governments in winter 2012–13. This funding was intended to help farmers who had lost their crops, to mitigate the effects of the drought, and to prepare for the new season.[26] However, as well as arriving late, in some regions the subsidies were notably smaller than the official estimates of direct losses made by the Ministry of Agriculture earlier in the autumn (Table 2).

**Table 2: Federal government subsidies to regions affected by the 2012 drought and official estimates of direct losses in those regions**[27]

| Region | Size of subsidy, RUR thousands | Official estimates of direct losses, RUR thousands |
|---|---|---|
| Altai region | 412,762.00 | 1,193,093.55 |
| Volgograd region | 383,836.70 | 1,565,131.56 |
| Rostov region | 401,598.70 | 249,518.44 |
| Stavropol region | 305,351.50 | 219,858.44 |
| **Total (20 regions)** | **6,000,000.00** | **14,211,860.13** |

This discrepancy and the fact that, according to some anecdotal evidence,[28] the subsidies did not reach all those who needed them, were among the key difficulties faced by farmers during the 2012 drought and its aftermath. However, this was only one of the issues raised by interviewees. Their experiences suggest many other challenges, as well as suggestions for new strategies to help adapt Russian agriculture to extreme weather events.

# 3 CONSEQUENCES

Drawing on the findings of Oxfam's interviews, this section outlines the key issues that farmers faced in dealing with both the immediate and long-term consequences of the 2012 drought.

## 3.1 DROUGHTS AND FARMERS' RESILIENCE

One of the most striking points that came up in the answers of interviewees across all six regions was that, while the 2012 drought was indeed extreme, it was also just one more in a series of droughts stretching over the past three to six years (depending on geographical location). This fact is key to understanding the difficulties faced by farmers in 2012: recurring droughts have seriously undermined farmers' resilience. When Oxfam asked farmers to compare their experiences of the 2010 and 2012 droughts, it became clear that the increased frequency of drought is making it harder and harder for them to start each new season.

*'In 2010, we were not so bound by loans, we had fewer debts, but now the situation is completely different. We had to take money from the mafia, and now that we go to bed, we are afraid that either they could cut off our heads or the bailiffs could come and take everything from our homes. Today, we could basically declare ourselves bankrupt and close down the farm.'*

Alexander D., from Altai region

Mikhail K. from Volgograd region described how four years of drought had completely halted his farm's development because he could not afford to buy new equipment and has new debts every season. Nikolay K. from Penza region told Oxfam that in 2010 it was easier to survive the drought because then his farm still had some grain stocks, but these had been depleted by the time the extreme 2012 drought struck just two years later. Anatolyi H., also from Altai region, echoed this, saying: 'If the next year is very dry, it will be a critical year for us – I'm not sure whether we would be able to survive. I think many farms will simply close down.'

## 3.2 UNEVEN LOSSES

Overall, almost all the farmers interviewed (with a handful of exceptions in the Astrakhan region) suffered crop losses as a result of the 2012 drought. In some cases, the losses were huge and brought farms to the verge of bankruptcy, as in the case of Vladimir B. above.

However, Oxfam's interviews with 56 people in six different regions showed that the extent of crop losses was quite different both within and between regions. While in some cases this was certainly related to differing climate conditions, in many cases it was the result of adaptation techniques used by farmers. This was especially apparent in situations where losses incurred by neighbouring farms differed quite substantially, or where farmers had very different yields in different areas of their farms. The general problem of most adaptation techniques, however, is their long-term financial affordability.

For example, in Astrakhan region, all those farmers that Oxfam talked to used irrigation systems, and this was the main reason why they did not suffer such big losses and why no state of emergency was declared in the region. However, while farmers in Astrakhan managed to save most of their crops through intensive watering, this significantly increased their expenses. Many of them told Oxfam, next year they are planning to reduce the areas under cultivation. Valeryi B., who was unable to pay back debts due to increased expenses, said that in 2013 no crops would be sown at all.

In Penza region, which also avoided declaring an emergency, it was crop diversification that helped many farmers to limit their potential losses. Several farmers told Oxfam that they had planted sunflowers, a crop that is becoming increasingly more suited to the changing climate conditions in their region. However, as a number of farmers pointed out, the main limitation of this measure is that the current market environment often makes it unprofitable to grow crops other than wheat.

Another key adaptation measure mentioned by many of those farmers less affected by the drought was leaving some land fallow. For example, Alexander O. from Rostov region said that, thanks to this measure, his yield of wheat was 3,500 kg/hectare while his neighbours were able to achieve only 800–1,000 kg/hectare. However, as several of the smallholders interviewed recognized**,** this adaptation measure could only be used by medium and large farms that could afford to leave some of their land fallow during the growing season.

Other techniques that helped farmers to save parts of their harvest in summer 2012 included shadowing; the application of herbicides; water-saving ploughing techniques; the use of fertilisers; high-tech equipment; and high-quality drought-resistant seeds.

## 3.3 QUESTIONABLE BENEFITS OF HIGH GRAIN PRICES

As mentioned above, the price of grain skyrocketed in winter 2012–13. However, the interviews suggested that very few farmers were actually able to benefit from this. The main reason was that most of them did not have much to sell. Some farmers (for example, Nikolay B. from Stavropol region) had already sold most of their grain in the autumn, when prices were still comparatively low. Also, some farmers pointed out that the

increases in grain prices were not proportionate to the increases in prices of agricultural inputs, which further decreased their profits. Farmers who had livestock lost even more due to high grain prices**,** since the price of fodder also went up while the price of meat remained stable.[29]

**Box 3: Export bans are bad for farmers**

Notably, three of the farmers interviewed, who were able to stockpile grain and sell it later in the year, some of it for export, pointed out that the absence of an export ban in 2012 was a very positive price factor. Rostov farmer Nikolai P. said, 'Thank God, last year our governors had more sense than to introduce an export ban. In 2010 when the export ban was introduced the wheat price went down to RUB 4, and no one wanted to buy even at that price. We had to borrow money with crazy interest rates to cover our expenses.'

## 3.4 COPING STRATEGIES

While some farmers were able to minimize their losses, and a handful were even able to benefit from higher grain prices, the majority Oxfam spoke to faced substantial crop losses. In order to deal with these losses, many farmers were forced to adopt a range of coping strategies, which further undermined their resilience.

- The first coping strategy was to reduce their number of employees or offer them unpaid leave. For example, Alexander D., from the Altai region, had to reduce the number of employees on his farm from 70 to 10. In his own words: 'I have to fire them because I do not have enough money to pay them a salary, and not because there is no work on the farm.'
- The second coping strategy was to take out additional loans. While some farmers were able to get loans for the new harvesting season from banks, as they had done before, others whose credit history did not allow them to do this had to turn to 'credit co-operatives'. On average the loans offered by credit co-operatives carry much higher interest rates than those offered by banks, making it even harder for farmers to repay them. For example, Islyam A., from Stavropol region, had to take a loan from a credit co-operative with an interest rate of 40 per cent.
- The third strategy, which many farmers were considering for the next season, was to reduce their area of cultivated land in order to reduce costs of labour, water, and agricultural inputs.
- The fourth strategy was to reduce livestock numbers, either by selling or slaughtering animals, in order to avoid additional costs for fodder, which had become very expensive.

# 3.5 INSURANCE

The adaptation strategy of taking out crop insurance appeared, either to have not worked well or not to have been used at all by the farmers whom Oxfam interviewed. A number of key factors made farmers reluctant to insure their crops:

- Farmers did not trust insurance companies because either they themselves or their acquaintances had had negative experiences of them.

> *'I will never ever go to insurance companies. We had cases in our district where farms could not get any insurance for lost harvests. One farm even had a two-year trial. I have a feeling that the goal of insurance companies is not to do fair business but rather to commit fraud. We are all shocked by the recent news that the government wants to make insurance obligatory for all farmers.'*
>
> Anatolyi G., Rostov region

- It was too expensive for farmers to insure their harvests.

> *'We are often criticized for not using this method [insuring crops]. But when other expenses are increasing it is not possible to find a big sum for insurance.'*
>
> Vasilyi S., Astrakhan region

- In the case of some farmers, their land, cultivation techniques, or crops did not meet the requirements of local insurance companies. This was the case for Sergey L., from Penza region, whose farm had small cultivated areas which did not qualify for insurance. Igor K., from Stravropol region, wanted to insure his onion fields, but his application was refused by the insurance company since, allegedly, there were no statistics on onion losses in this region.

However, it was very clear from Oxfam's conversations with farmers that they did consider that insurance could potentially be a key factor in successful adaptation to extreme weather events. They would be ready to use it, if it was more affordable and less risky:

> *'We've never messed around with insurance. People say it's un-profitable. You'd waste a lot of time and nerves and in the end you'd owe something to somebody. It's puzzling for me why it is like this. At the end of the day people insure cars and properties. Farmers have a very risky business, and they more than anyone need some kind of guarantee.'*
>
> Sergey I., Penza region

# 3.6 STATE SUPPORT

Oxfam asked farmers about their experiences in getting state compensation, which (as mentioned above) was given to four of the six regions in which research was conducted. What the interviews showed is that not all farmers from the affected regions received compensation. A number of reasons were given for this:

- Some farmers did not meet the criteria imposed by regional governments. For example, Anatoly S., from Altai region, explained that, although his harvest was miserably small, his farm did not qualify for state compensation because it did not meet the criterion of having an average grain harvest of less than 400 kg/hectare. Similarly, Kadirbek K., from Stavropol region, told Oxfam that his farm did not receive compensation because it did not write off its harvest completely. Yelena T., from Volgograd region, did not get any compensation because the regional authorities did not allocate anything to farms specializing in growing vegetables. Finally, owners of family/subsistence farms did not qualify for state compensation at all.
- Some of the farmers interviewed were not able to collect all the necessary papers for claiming compensation. This was the case for Tatyana T., from Stavropol region, who did not have the administrative capacity to do all the paperwork required. Vladimir C., from Rostov region, told Oxfam, '*For those small farms which don't have an accountant on a permanent basis it's even more difficult to deal with all this terrible red tape.*'
- In some regions (including Stavropol and Rostov), regional governments declared a state of emergency in only certain districts. This meant that state compensation went only to farms located in emergency districts. However, as several interviewees from 'non-emergency' districts pointed out, in their opinion these decisions were made in a manner that was not at all transparent.

> *'None of the districts in the south and east of the region got into the emergency zone, although it is very strange – there were frost and drought throughout the whole region. But the emergency was declared only for four districts in the north of the region.'*
>
> Oleg K., Rostov region

Furthermore, even farmers who did get state compensation received quite insignificant amounts. For example, Olga K., from Altai region, received RUR 59,000 (around £1,250) in subsidies for seeds, while actually, she claimed, her farm needed RUR 1.28m (around £26,600) to prepare for the new sowing season. Sergey D.'s farm in Volgograd region received much less compensation than was initially promised – RUR 360,000 (around £7,500) instead of RUR 3m (around £62,500).

Moreover, during the process of allocating compensation the regional governments prioritized farmers who owned livestock. As a number of interviewees pointed out, this resulted in very unequal allocations. For example, Alexander S., from Volgograd region, told Oxfam that he received RUR 1.3m, which compensated him for about 40 per cent of his

losses, but he believed that he only received so much because he had livestock. His neighbour, who suffered comparable crop losses, but did not own any livestock, received only RUR 280,000.

Finally, at the time the interviews were conducted in February 2013, a number of farmers who had applied for compensation had still not received a response, which meant that many of them had to start the new sowing season without the support they so urgently needed.

## 3.7 EXTREME WEATHER AND THE FUTURE OF FARMING

After all the challenges that farmers faced during and after the 2012 drought, for quite a few of them the future of their farms and the future of agriculture in their regions looked quite grim.

> *'If such climate processes continue, if more droughts take place, I'm sure that 90 per cent of farms will close. I'm not talking about only our district…'*
>
> Vladimir B., Altai region

> *'Another year like [2012] and smallholders will simply cease to exist altogether.'*
>
> Oleg K., Rostov region

> *'I think that another 2 to 3 years like 2012, and I will give up on farming. And most of my colleagues will do the same. What is the sense in operating at a loss?'*
>
> Rakhmet D., Stvaropol region

> *'It's going from bad to worse from year to year. We don't have the harvest that we used to have before. The weather has become hotter, and there's almost no rain.'*
>
> Elena L., Volgograd region

> *'Such hot weather will inevitably influence everything, the yield will decrease. We will be losing harvest. Such hot weather has not been typical and is not favourable for our region. If the climate continues changing in this direction, it will only become worse.'*
>
> Maria T., Astrakhan region

However, not all the farmers were so pessimistic, and many will continue their work and battle against the weather for as long as they can.

> *'We are trying not to give up. We are trying to use more modern technologies […] which are, of course, expensive, but effective. We will also use modern sorts of seeds, which are more resistant. So, we will try to survive.'*
>
> Elena T., Volgograd region

*'It is difficult…. We are in the zone of high-risk agriculture, and in this hot weather, with a plague of grasshoppers it is difficult not only to breathe, but also to work. But we won't leave the land, because it is our land. Of course, we won't be able to afford a lot and will never become rich, but…'*

Galina D., Volgograd region

However, what united both groups was their certainty that, to ensure a future for agriculture in their regions, a number of public policy measures need to be taken urgently.

*'Only state support and compensation can save us. But, in any case, I am not going to give up my work; I will continue to search for ways out from such situations and will continue my favourite pursuit. I can't live without land now, although I have only recently come to agri-culture.'*

Tatyana C., Altai region

# 4 FARMERS' VOICES: OVERCOMING DROUGHT TOGETHER WITH THE STATE

This section looks in more detail at the farmers' visions of the adaptation policies that are required to deal with extreme weather events, which they shared at the end of their interviews. Their ideas have been shaped both by their own experiences of adaptating to extreme weather events in recent years, by other, more localized events, and by the experiences of their colleagues in Russia and abroad.

## 4.1 A RELIABLE SYSTEM OF CROP INSURANCE

The experiences of most of Oxfam's interviewees suggests that the system of crop insurance promoted in recent years by top-ranking officials as being essential for sustainable agricultural development[30] has so far been largely ineffective in mitigating risk.

> *'If only there were no swindlers in the insurance companies, we would insure our crops and get insurance in such cases as droughts. This is another way out of such situations, but we don't trust [the companies] yet – they're constantly cheating on us.'*
>
> Olga K., Altai region

However, interviewees suggested a number of ways in which the crop insurance system could be improved to make it more trustworthy and a more effective adaptation tool.

- The current crop insurance system requires the development of a comprehensive regulatory framework, which would clarify the rights and duties of all parties, and would make the process of applying for and receiving insurance payments less bureaucratic.
- Insurance companies often lack the capacity to properly calculate agricultural risks (i.e. they have no agricultural specialists or lack access to data) and to devise insurance plans that would satisfy both their own and farmers' interests. It is therefore necessary to build the capacity of insurance companies.
- Cost-sharing between farmers and the state should be made obligatory, and the share of the state contribution should either be equal to or exceed the share of the farmers' contributions. The federal government is actually taking steps in this direction. In May 2012 it

announced that regional governments would be expected to contribute up to 50 per cent of insurance fees, but has not yet been implemented in all regions.[31]

- Crop insurance should be available for all types of farm, including those made up of small plots of land.
- Fraud committed by insurance companies should be tackled, in order to improve farmers' trust in them.

## 4.2 REDUCING PRICE VOLATILITY

> *'Price volatility is our main enemy. We do not know what we will be able to sell our harvest for, or whether we will be able to buy fuel. All this has very negative impacts on agriculture.'*
>
> Analtolyi S., Altai region

Many of the farmers interviewed pointed out that a price regulation policy was needed which would make prices for their produce less volatile. This would allow long-term financial planning, which they see as key to the sustainability of their farms, especially in the face of a changing climate.

> *'If there was an organization, even if it was a state one, which would guarantee the price of our produce at a certain level, I would be happy. In that case – whether in a drought or whenever – we could work, work, and work.'*
>
> Abdula K., Astrakhan region

> *'In the previous three years we felt the same, we had problems with selling our produce. Now we have lost 60 per cent of the harvest because of the drought, and in the previous years we lost because of the price when selling grain. Grain cost RUR 3,500–3,600 per tonne. So, basically, we worked for free in all three years. […] At the moment, in agriculture, we don't have any security. In 2013, if the harvest is good, they will drop the price to RUR 3,000 per tonne, so it's also going to be a "drought", but one that no one's going to see.'*
>
> Elena L., Altai region

The main ways in which price volatility could be reduced, according to interviewees, included:

- Improving farmers' access to the market by reducing the number of mediators in the value chain;
- Improving farmers' access to storage and processing facilities, especially for smallholders who often cannot meet the entry requirements of grain elevators. For example, in Svetlana N.'s district in Volgograd region, the elevator company accepts only very large amounts of grain, of more than 100,000 tonnes;
- Avoiding export bans.

# 4.3 STATE SUPPORT

*'The most important thing is state support. If the state would turn its face towards us, it would be easier to work and to live.'*

Ludmila K., Altai region

This was the key message that almost every farmer Oxfam talked to tried to convey. Farmers outlined a number of ways in which the mechanisms of state support could be improved and made more efficient.

- The system of state compensation should be made more equitable, sustainable, and predictable, and the size of compensation payments should correspond to losses incurred. State compensation in this context refers to one-off payments from the federal and/or regional budgets to farmers to compensate for losses caused by natural hazards, such as the 2012 drought.

  *'[Compensation] should not be given spontaneously – "Give to this one and not to that one." It should be a well functioning mechanism, so that farmers could be sure that in a difficult moment they would get support.'*

  Sergey I., Penza region

- The system of farm subsidies should be made more predictable, so that, even when faced with extreme weather conditions resulting in significant losses of harvest, farmers could be sure about the support they can count on for the following season.

  *'Imagine, last year I got RUR 1m [around £20,800) for mineral fertilizers, and this year just RUR 50,000 [around £1,040].'*

  Nikolai P., Rostov region

- Farm subsidies should be allocated on a per hectare basis, which would ensure that all types of farm are entitled to state support, irrespective of their size. Several of the smallholders interviewed pointed out that, in 2012, large farms received much more support than smaller ones. A per hectare subsidy was introduced by the Ministry of Agriculture in 2013 [32] and farms have been getting per hectare payments since spring 2013. However, evidence suggests that, so far, small farms have been disadvantaged by the new system. Local governments have introduced additional criteria for getting subsidies, such as an obligation to increase farming land, which frequently can only be met by larger farms.[33]
- The system of farm subsidies should be made more equitable by taking into consideration the varying soil and climatic conditions in which farms operate. Under the Ministry of Agriculture's programme of per hectare subsidies, subsidies will be allocated according to this principle. As such, by early 2014, it may already be possible to see the effects of this redistribution.[34] However, subsidies are expected to be small – on average no more than RUR 300 per hectare (£6.20)[35] – so they may have little effect.

- The system of farm subsidies should be designed in ways that make it possible for small and medium-sized farms to access them. Red tape and a lack of information are the main obstacles to getting subsidies for small farms that lack administrative capacity, as well as time and human resources.
- After droughts, farmers need subsidies for seeds to be able to start a new sowing season.

> *'We need at least a little bit of attention from the state. If they support us, i.e. by providing seeds, we will be able to sow; if they don't – we won't.'*
>
> Vladimir B., Altai region

- The system of farm subsidies should include subsidies for energy- and resource-efficient technologies. Such technologies would allow farmers to save on costs and would thus help to compensate for losses caused by extreme weather events.
- Affordable loans and subsidies on loan interest rates are key to successful adaptation. In increasingly volatile climate conditions, where farmers are increasingly unsure whether new harvests will allow them to pay back existing loans, such subsidies often determine whether or not they can plant for a new season.

Farmers also outlined a number of other areas where the involvement of public authorities is important for successful climate adaptation. These included:

- Conducting scientific consultation and research, and recommending new drought-resistant crop varieties and methods of protecting crops;
- Renovating irrigation systems and improving farmers' access to water;
- Afforestration;
- Reintroducing publicly funded pest management programmes, as recurring droughts have also exacerbated the problem of pests.

In conclusion, according to Oxfam's interviewees, no adaptation policies will be possible without state support. As Olga K., in Altai region, put it, 'We need state support – we don't see any other ways out of this kind of situation [the 2012 drought]. We're powerless to do anything without it.'

# 5 CONCLUSIONS

The 2012 drought was an extreme weather event that reduced grain production in Russia by almost 25 per cent, drove up food prices, and caused significant economic damage to farmers across 22 regions. At the same time, it was just one more in a series of extreme weather events that are becoming increasingly common in Russia. This makes the task of devising a comprehensive, coherent, and specific adaptation policy to extreme weather events even more urgent.

Oxfam's conversations with 56 farmers from six regions affected by the 2012 drought revealed how increasingly vulnerable they are becoming to such weather shocks and how challenging it is for them to adapt to changing climate conditions. But at the same time many of them are determined to stick to their task, well aware that they will have to do that under new climate realities. To successfully adapt and survive, they need the state to 'turn its face' towards them.

> *'If the state needs farmers, needs grain, it should approach everyone objectively and help. Not just give a promise and then not fulfil it, but help concretely. If they do not need agriculture, then they can continue treating us as they have done so far. We are not just entrepreneurs who buy and sell. We are working towards the state's goal of ensuring food security, and therefore we should be treated differently. Don't just give us money for surviving.'*
>
> Sergey D., Volgograd region

# APPENDIX 1: METHODOLOGY

The sample consisted of 56 people, and was formed through a combination of snowball and convenience sampling techniques. The interviews were conducted by Oxfam's local NGO partners and journalists from the RIA news agency.

Interview questionnaire:

1. Tell us a little about yourself and your family (name, age, occupation, place of work and residence).
2. When and how did you get started in agriculture? What were the main stages of your career? Tell us about the farm where you work?
3. Have you observed in the recent years signs of climate change in your region? If so, which ones? How do you assess these changes?
4. In your opinion, what caused the 2012 drought? How has the drought impacted your farm and harvest? (Encourage the interviewee to give as many examples as possible.)
5. Could you tell us in detail (by week or month) what measures your farm has taken to combat the effect of the drought and its consequences? How do you assess the damage incurred?
6. Have you managed to get compensation for the losses?
7. Did you receive support from regional/municipal budgets due to the abnormal drought conditions of 2012?
8. (If the farm insured the crop): Were you able to get insurance payments?
9. Has the drought affected the prices of your produce?
10. If we compare the situations that your farm faced in 2012 and in 2010, what similarities and differences can you note?
11. How, in your opinion, will climate change affect the agricultural production of your farm?
12. What should be done to minimize the negative impact of such phenomena as the 2012 drought on your farm and the farms of your colleagues?

# APPENDIX 2: LIST OF PARTICIPANTS

| No | Region | Name | Type of farm and cultivated area | Type of produce |
|---|---|---|---|---|
| 1 | Altai | Vladimir B. | Peasant farm enterprise, 1,200 hectares | Grain and livestock |
| 2 | Altai | Alexander D. | Peasant farm enterprise, 9,000 hectares | Grain |
| 3 | Altai | Olga K. | Peasant farm enterprise and family/subsistence farm, 710 hectares | Grain |
| 4 | Altai | Ludmila K. | Peasant farm enterprise, 5,400 hectares | Grain |
| 5 | Altai | Elena L. | Peasant farm enterprise, N/A | Grain |
| 6 | Altai | Anatolyi S. | Peasant farm enterprise, 5,600 hectares | Grain and livestock |
| 7 | Altai | Tatyana C. | Peasant farm enterprise, 100 hectares | Grain |
| 8 | Volgogradskyi region | Galina D. | Private limited company, 2,400 hectares | Grain |
| 9 | Volgogradskyi region | Sergey D. | Peasant farm enterprise, 3,000 hectares | Grain |
| 10 | Volgogradskyi region | Mikhail K. | Private limited company, N/A | Grain |
| 11 | Volgogradskyi region | Elena L. | Peasant farm enterprise, N/A | Grain, livestock, melons |
| 12 | Volgogradskyi region | Svetlana N. | Peasant farm enterprise, N/A | Grain, livestock |
| 13 | Volgogradskyi region | Alexander S. | Peasant farm enterprise, 1,400 hectares | Grain, vegetables, livestock |
| 14 | Volgogradskyi region | Elena T. | Peasant farm enterprise, 100 hectares | Vegetables |
| 15 | Volgogradskyi region | Alexander Y. | Peasant farm enterprise, 2,000 hectares | Grain and livestock |
| 16 | Rostovskii region | Mikhail B. | Peasant farm enterprise, 430 hectares | Grain |
| 17 | Rostovskii region | Anatolyi G. | Peasant farm enterprise, 900 hectares | Grain |
| 18 | Rostovskii region | Oleg K. | Peasant farm enterprise, 820 hectares | Grain and livestock |
| 19 | Rostovskii region | Nikolay P. | Peasant farm enterprise, 4,000 hectares | Grain, fodder, livestock |
| 20 | Rostovskii region | Vladimir C. | Joint stock company (Agroholding), N/A | Grain |
| 21 | Rostovskii region | Maria S. | Family/subsistence farm, N/A | Vegetables and poultry |
| 22 | Rostovskii region | Lilya S. | Family/subsistence farm, N/A | Vegetables and poultry |
| 23 | Rostovskii region | Elena T. | Family/subsistence farm, N/A | Vegetables and poultry |
| 24 | Rostovskii region | Alexander O. | Peasant farm enterprise, 1,000 hectares | Grain |
| 25 | Rostovskii region | Alexey Z. | Peasant farm enterprise, 2,800 hectares | Grain and livestock |
| 26 | Stavropol krai | Islyam A. | Peasant farm enterprise, 200 hectares | Grain |

| | | | | |
|---|---|---|---|---|
| 27 | Stavropol krai | Nikolay B. | Peasant farm enterprise, 200 hectares | Grain |
| 28 | Stavropol krai | Rakhmet D. | Peasant farm enterprise, 92 hectares | Grain |
| 29 | Stavropol krai | Kadirbek K. | Peasant farm enterprise, 600 hectares | Grain and livestock |
| 30 | Stavropol krai | Igor K. | Peasant farm enterprise, 600 hectares | Grain |
| 31 | Stavropol krai | Lidiya S. | Family/subsistence farm, N/A | Potatoes, vegetables, livestock, poultry |
| 32 | Stavropol krai | Raisa K. | Family/subsistence farm, N/A | Vegetables and herbs |
| 33 | Stavropol krai | Igor K. | Joint stock company, 7,000 hectares | Grain, potatoes, vegetables |
| 34 | Stavropol krai | Lyubov M. | Family/subsistence farm, N/A | Fruits and vegetables |
| 35 | Stavropol krai | Natalia S. | Family/subsistence farm, N/A | Fruits, vegetables, poultry |
| 36 | Stavropol krai | Tatyana T. | Peasant farm enterprise, 180 hectares | Grain |
| 37 | Penza region | Sergey I. | Peasant farm enterprise, 4,000 hectares | Fodder, livestock, fish |
| 38 | Penza region | Anatolyi E. | Individual farm enterprise, 1,000 hectares | Grains and livestock |
| 39 | Penza region | Petr S. | Peasant farm enterprise, 800 hectares | Grain |
| 40 | Penza region | Sergey L. | Peasant farm enterprise, 100 hectares | Fodder and livestock |
| 41 | Penza region | Alexander C. | Individual farm enterprise, 1,300 hectares | Grain and livestock |
| 42 | Penza region | Sergey D. | Peasant farm enterprise, 2,300 hectares | Grain |
| 43 | Penza region | Alexey K. | Individual farm enterprise, 150 hectares | Grain and livestock |
| 44 | Penza region | Nikolai K. | Individual farm enterprise, 500 hectares | Grain |
| 45 | Penza region | Alexander Z. | Joint stock company, 3,817 hectares | Grain and fodder |
| 46 | Penza region | Nikolai N. | Peasant farm enterprise, 940 hectares | Grain |
| 47 | Astrakhan region | Albert A. | Peasant farm enterprise, 140 hectares | Vegetables |
| 48 | Astrakhan region | Natig B. | Peasant farm enterprise, 80–100 hectares | Vegetables |
| 49 | Astrakhan region | Anatolyi B. | Peasant farm enterprise, 300–400 hectares of cultivated land and 900 hectares of water | Melons and fish |
| 50 | Astrakhan region | Valeryi B. | Peasant farm enterprise, N/A | Vegetables |
| 51 | Astrakhan region | Abdula K. | Peasant farm enterprise, 1,100 hectares | Rice, medic, livestock |
| 52 | Astrakhan region, | Vasilyi S. | Private limited company, 1,200 hectares | Rice, grain, vegetables, potatoes |
| 53 | Astrakhan region | Apshatar T. | Peasant farm enterprise, 45 hectares | Vegetables |
| 54 | Astrakhan region | Gulnara T. | Private limited company, 800 hectares | Fodder and livestock |
| 55 | Astrakhan region | Maria T. | State enterprise, N/A | Fruits |
| 56 | Astrakhan region | Lev T. | Private limited company, 700 hectares | Vegetables, melons, grain |

# APPENDIX 3: AFFECTED REGIONS

| No. | Region | Number of farms affected | Affected area, hectares | Direct losses, RUR thousands |
|---|---|---|---|---|
| **Russian Federation** | | **9,437** | **5,500,354.38** | **1,4211,860.13** |
| 1 | Republic of Kalmykia | 140 | 114,674.00 | 347,658.21 |
| 2 | Stavropol region | 160 | 71,066.43 | 219,858.44 |
| 3 | Republic of Bashkortostan | 1,583 | 577,723.6 | 1,726,104.48 |
| 4 | Orenburg region | 1,413 | 1,073,678.00 | 2,323,056.89 |
| 5 | Saratov region | 418 | 190,445 | 467,039.58 |
| 6 | Omsk Region | 277 | 283,514.60 | 521,724.68 |
| 7 | Republic of Tatarstan | 692 | 345,086 | 1,607,425.37 |
| 8 | Altai | 2,077 | 719,891.38 | 1,193,093.55 |
| 9 | Chelyabinsk region | 480 | 529,509.56 | 1,162,592.83 |
| 10 | Novosibirsk region | 563 | 210,359.20 | 472,250.83 |
| 11 | Ulyanovsk region | 237 | 98,238 | 358,079.48 |
| 12 | Tomsk region | 122 | 52,818.7 | 172,543.86 |
| 13 | Kemerovo region | 188 | 126,115.50 | 338,933.70 |
| 14 | Kurgan region | 549 | 359,680.10 | 998,055.33 |
| 15 | Volgograd region | 1,584 | 540,704.2 | 1,565,131.56 |
| 16 | Rostov region | 355 | 90,037 | 249,518.44 |
| 17 | Republic of Khakassia | 45 | 14,570.00 | 29,522.72 |
| 18 | Republic of Tuva | 47 | 2,312.00 | 5,415.99 |
| 19 | Bryansk region | 325 | 63,933.11 | 286,269.98 |
| 20 | Chechen Republic | 312 | 35,998.00 | 167,584.21 |

# NOTES

All URLs last accessed September 2013.

[1] Federal Service for Hydrometeorology and Environmental Monitoring of the Russian Federation (ROSHYDROMET) (2013) 'Report on the specifics of climate on the territory of the Russia Federation in 2012', Moscow: ROSHYDROMET, http://meteorf.ru/upload/iblock/606/%D0%94%D0%BE%D0%BA%D0%BB%D0%B0%D0%B4%20%D0%BE%20%D0%BA%D0%BB%D0%B8%D0%BC%D0%B0%D1%82%D0%B5%20%D0%A0%D0%A4%20%D0%B2%202012.pdf

[2] *Ibid*.

[3] *Ibid*., p.64

[4] Ministry of Agriculture of the Russia Federation (2012) 'On current situation in the agricultural sector of the Russia Federation in September 2012', http://www.mcx.ru/documents/document/v7_show/20406.285.htm

[5] Agency for economic information (PRIME) (2013) 'ROSSTAT ascertained the data of grain crops in the Russian Federation in 2012 – 70.9m tonnes', http://1prime.ru/Agriculture/20130312/761710858.html

[6] See note 4

[7] Oxfam's monitoring is currently being implemented in Russia and the South Caucasus countries (Armenia, Azerbaijan, Georgia). Results of the monitoring in Russia are expected to be released in winter 2014 upon the completion of the end phase.

[8] Ministry of Economic Development (2013) 'On the situation of the grain market', 8 April 2013. http://www.budgetrf.ru/Publications/mert_new/2013/MERT_NEW20130416832/MERT_NEW20130416832_p_010.htm

[9] Author's calculations, based on Russian Federal Service of Statistics (Rosstat), http://www.gks.ru/dbscripts/cbsd/DBInet.cgi?pl=1921002

[10] Currently, in the open access, there is no farm-level systematised data on the damages caused by the 2012 drought. However, anecdotal evidence suggests that the situation of some of the farms was very serious. See, for example, Amicru (2012) 'Standing on the knees, the farmers mourned lost crops: The nature is taking away the last from grain growers', http://www.altairegion.ru/news/189508/; AiF Volgograd (2012)'Russian farmer counts only on himself', http://www.vlg.aif.ru/apk/article/30102

[11] Climate Doctrine of the Russian Federation, http://archive.kremlin.ru/eng/text/docs/2009/12/223509.shtml

[12] Plan of realization of the climate doctrine of the Russian Federation until 2020: http://climatechange.ru/node/475

[13] Y. Yamineva (2012) 'Climate Law and Policy in Russia: A Peasant Needs Thunder to Cross Himself and Wonder', in B. Erkki, J. Hollo, Kati Kulovesi and Michael Mehling (eds.) 'Climate change and the law', *Ius Gentium: Comparative Perspectives on Law and Justice*, Vol.21, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2159197

[14] S. Kiselev et al. (2012) 'The adaptation challenge: Key issues for crop production and agricultural livelihoods under climate change in the Russia Federation', Oxford: Oxfam, http://policy-practice.oxfam.org.uk/publications/the-adaptation-challenge-key-issues-for-crop-production-and-agricultural-liveli-250731

[15] ROSSTAT (2013) 'Agricultural produce in 2012', Moscow: ROSSTAT, http://www.gks.ru/free_doc/doc_2012/bul_dr/SborVal_pr12.xls

[16] Federal Law of the Russian Federation from 24 July 2007 N 209-FZ, 'On development of small and medium-sized enterprises in the Russia Federation', http://www.rg.ru/2007/07/31/biznes-doc.html

[17] Federal Law of the Russian Federation from 7 July 2003 r. N 112-FZ, 'On subsistence farms', http://www.rg.ru/2003/07/10/odsobhoz-dok.html

[18] Business newspaper South (2013) 'In Russia, 16 regions are suffering from the drought',17 July 2012, http://www.dg-yug.ru/a/2012/07/17/V_Rossii_16_regionov_stra

[19] Ministry of Agriculture of the Russia Federation (2012) 'Final registry of the subjects of the Russian Federation that incurred losses as a result of the 2012 drought', http://www.mcx.ru/documents/document/v7_show/20779.285.htm

[20] Commersant (2012) 'Ministry of Agriculture of the Russian Federation estimated the farmers' losses from the 2012 drought', 9 October 2012, http://www.kommersant.ru/news/2040730

[21] See Note 18.

[22] Bezformata.ru (2013) 'Ministry of agriculture has recognised that it estimated the damage caused by the droughts relying on the photos', http://novosibirsk.bezformata.ru/listnews/chto-otcenival-usherb-ot-zasuhi/11114402/

[23] See author's own calculations based on Rosstat preliminary data on agricultural production in 2012 (note 14) and

Ministry of Agriculture of the Russian Federation (note 18)

[24] Rosstat, 'Methodological guidelines on calculation of the volume and index of agricultural production'. http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/economy/

[25] A. Romanov (2012) 'In Russian regions there is a drought: There will be no harvest', 6 July 2012, Vesti.ru, http://www.vesti.ru/doc.html?id=843052

[26] Ministry of Agriculture of the Russia Federation (2012) 'Farms damaged by the summer drought will get support in December', 23.11.2012. http://www.mcx.ru/news/news/v7_show/7724.285.htm

[27] Federal law, 'On changes in the federal law on federal budget for 2012 and for the planning period 2013 and 2014' and Ministry of Agriculture of the Russian Federation

[28] See Note 21.

[29] Purchasing prices of meat in 2013 decreased because of new regulations related to Russia's WTO accession. See, for example, http://vrn.kp.ru/daily/26063/2972086/

[30] Information agency News of the Federation (2012) 'Medvedev has promised crop insurance', 16 May 2012, http://wiki-ins.ru/news/1-news/3047-2012-05-16-12-08-09.html

[31] See Note 29.

[32] Peasant news media group (2013) 'Ministry of Agriculture of the Russia Federation is considering increasing the volumes of per hectare subsidies' , 28 January 2013, http://www.agronews.ru/news/detail/124395/

[33] B. Tumakov (2013) 'About the difficulties of getting subsidies for farming land by small holder farmers', 5 May 2013, http://www.youtube.com/watch?v=uPEpyg6udRw

[34] See Note 31.

[35] Ministry of Agriculture of the Russian Federation (2013) 'Farmers will get per hectare support, subsidies for elite seeds and will be able to use special grants', 6 March 2013, http://www.mcx.ru/news/news/v7_show/10040.285.htm

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