Main Ideas and Methods of Social Agronomy (Part 2)[1]

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The second part of Chayanov's book *Main Ideas and Methods of Social Agronomy* consists of chapters presenting the specific features of the Russian social-agronomic work among the peasantry. In the first chapters (published in the previous issue of the *Russian Peasant Studies*), Chayanov focused on the strategic and worldview aspects of social agronomy; in the second part, he analyzes tactical directions of social-agronomic work: methods of oral, social-agronomic propaganda; conversations, lectures, courses and agronomic consulting; agricultural exhibitions, demonstration plots, model farms and peasant excursions; agricultural warehouses, rental points and grain-cleaning stations; organizational work of the agronomist; social agronomy and cooperation; the equipment of the agronomic station; registration and evaluation of social-agronomic activities. In all these chapters, Chayanov shows how creative the work of the social agronomist should be, how many diverse and unexpected challenges he faces when interacting with peasant communities, audiences and households. The interaction of social agronomy with another influential institution — agricultural cooperation — is of particular interest. Chayanov analyzes in detail the contradictions and distinctions in the work of agronomists and cooperators, in their common tasks of developing and improving the peasant life. Despite the fact that the book was published a hundred years ago, it is not only of historical interest but presents many valuable answers and practical recommendations for the contemporary agricultural consulting and rural development activists.

Key words: social agronomy, peasants, agricultural education, agrarian reform, agricultural cooperation

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Chapter 6. Methods of oral, social-agronomic propaganda

The main weapon of the social agronomist is his words. Live speech is the most important means of changing minds and the only way for extensive social work. The social agronomist spends most of his time on oral, pedagogical work — talking with groups of peasants in taverns and teahouses — sometimes at peasant gatherings, cooperative meetings, or "meetings of the agricultural society"; giving lectures; and organizing training courses.

In his cultural, pedagogical work, the social agronomist is not alone — *zemstvo* organizers with education obtained out of school, political propagandists, and cooperative instructors work with him. Thousands of conversations and lectures, hundreds of peasant courses, people's houses, libraries, cooperative meetings, and the Russian rural theater movement prove the pedagogical significance of the current period in the history of the Russian peasantry. Our village was never under such a powerful, educational influence. Certainly, its success will depend mainly on how well its actors are trained for their pedagogical work.

The majority of today's workers — agronomists, lawyers, natural scientists, economists, and philologists — have no theoretical training in pedagogy. Therefore, when taking up the task of mass pedagogical work, they are forced to find its methods with great difficulty, by trial and error. The lack of special training dooms them to making unacceptable mistakes, about which we constantly hear. They often take several years to discover the pedagogical Americas that were already known in the days of Jan Amos Komenský. Thus, we have to include the huge pedagogical experience of humankind in the training of future cultural workers of the village.

Someone might object that the lecturer's work is a part art, and that no science can make someone a good lecturer. We agree but still argue that if science cannot make someone a lecturer, it can help him to become a lecturer. If someone is to become an educator, knowledge of the organized experiences of humans would certainly help his work. Knowledge of the key features of the object of pedagogical work, of the methods to influence his mind, memory, and will according to his mental abilities, of the techniques of such influence — these are the necessary weapons of every agronomist, cooperative organizer, and lecturer.

The need for such training has long been known and recognized. We do not see it in real life primarily because of a lack of relevant works. Most theoretical teachers focus on teaching methods for children and youth rather than on the out-of-school methods for uncultured adults. In the Tula or Yaroslavl Provinces, the psychology of a forty-year-old peasant as an object of pedagogical influence is significantly different from a seven-year-old, American schoolboy. There-

fore, pedagogical techniques successfully applied to the latter do not guarantee success when applied to the former. Thus, in addition to already collected, and systematized, pedagogical experiences, it is necessary to conduct a special study of our object and use the still unsystematized experience accumulated by the work of agronomists, cooperation instructors, and lecturers of people's universities.

Certainly, this book does not aim to fill the above-mentioned gap in pedagogical work but rather sets a more modest task — to outline in the most general terms those pedagogical issues, which every lecturer faces when speaking to people and about which the author of this book and his colleagues in the cooperative and agronomic work have repeatedly thought.

The first of these issues is the task of the lecturer in speaking to people. The assessment of the methods and results of his work is possible only if we know its goals and only in terms of their achievement. There are four groups of the numerous tasks of the people's lecturer: first, to provide the audience with new ideas and, thus, to broaden its worldview. In many of the darkest corners of our homeland, this task is the most important. For instance, the cultural workers of the Volyn Province visited villages in which the whole world of the peasants was limited to a radius of five *versts* (1.06 km). In the regions of commercial seasonal work, this radius is larger, but the peasant's worldview is still very constricted. In such circumstances, the lecturer has to enrich the peasant's worldview not only with new representations related to his course — separators, chemical analysis, artificial fertilizers, consumer shops, secretaries, accounting books, etc. — but also with many general cultural, geographical, and natural-historical representations.

The second task of the lecturer, which is much more complex, is to explain new concepts and systematize the old ones for the peasant audience. The first part of this task — the presentation of the concepts still unknown in the village (cooperation, production credit, Raiffeisen principles, chemical processes, and elements, etc.) — is very complex. Nevertheless, it does not face the obstacles of the second part of the task, which is the rational organization of the traditional concepts.

The peasant's thinking is empirical in nature, a common example of which is folk omens, such as "red sunset means windy tomorrow", "on St. George's Day take your cattle to pasture", etc. The peasant's mind mechanically connects two representations or concepts as constantly related without rationalizing or explaining their relationship, and uses it as an empirically established law. In the same way, there is a historically established, empirical relationship of some concepts that make up the peasant worldview — "women are long of hair and short of brains", "it's a sin to plow on a Holy Day", etc. Different peasant representations and concepts are connected by the elementary empirical relationships-statements. The entire, centuries-old life of a peasant consists of everyday skills and a rigid col-

lection of disconnected statements that lack flexibility and cannot be logically systematized.

The people's lecturers have the honorary task of rationalizing this experience, making it flexible and changeable, and transferring the peasant from the path of empirical thinking to the path of logical thinking. In other words, the lecturer is to radically change the entire organization of peasant thinking by replacing everyday experience with logical reasoning.

These two key tasks are not the most important ones. Informing the peasant audience about new ideas and concepts and systematizing the centuries-old, peasant experience allow the peasants to stay completely passive. However, if we seek the revival of the Russian village, the most valuable path for the peasant audience is the active and deedful perception of the foundations of the new culture. We have to raise a number of urgent pressing questions and draw the attention and will of our listeners to them.

Moreover, these questions should not be rhetorical, should not be determined by the construction of our lecture, but should be clear for our listeners. These questions should interest the listener; in his soul, there should be a persistent thought — "How can we really solve this question?" Without such a thought in the listener's soul, our lecture loses two-thirds of its meaning, because our main task is not to inform the population of as many new ideas and facts as possible, but to wake up the initiative of the population and direct it to the right path.

It would be a miserable utopia to think that the reform of the Russian economic and cultural foundations can be implemented by creating recipes and by having agronomists or cooperative instructors instruct all peasant economies individually. We play the role of the fermentation enzyme that sets in motion powerful spontaneous forces. Only the self-active peasantry can implement the economic reforms that we dream about.

This ultimate goal of our work determines the fourth task of our lecturer — to give his audience an emotional impetus, to share with his audience the social energy inherent in the powerful stream of the Russian revival. Without such an emotional impulse, our lectures are just curious stories about how the German peasant sowed clover or how profitably the Danish peasants sold eggs in cooperation, but such lectures would lack the necessary feature of the social progress engine.

Thus, the lecturer of the people's audience faces four groups of tasks: 1) to broaden the listeners' horizon of thinking and enrich it with new ideas; 2) to create a series of new concepts in the minds of listeners and organize all their empirical experience; 3) to pose a number of questions to the audience; and 4) to give listeners an emotional impulse to awaken their initiative.

When starting to achieve these tasks, the thoughtful lecturer has to think about an issue that requires very careful consideration. In

addition to the concepts from the peasant worldview and experience, upon which we can build our lectures, there are many concepts and ideas that contradict contemporary science and ethics — for instance, the well-known idea of the chariot of Elijah-the-Prophet as the generator of heavenly thunder. Should we fight these false concepts and try to erase them from the peasant consciousness, or should we accept the amorphous and fragmented nature of such outlooks and ignore those false ideas when developing a scientific worldview in the peasant mind? The latter is the only acceptable path for the lecturer. If he starts a debate about the centuries-old images and concepts, he often does not have enough authority to refute them, but, in the attempt, he revives these false images and ideas in the listener's mind. Moreover, we cannot answer the straightforward question: does a drill-seeder or the chariot of Elijah-the-Prophet rumble in the thunderclouds?

It seems that the task of the Russian revival is to enrich the peasant thinking with a contemporary, scientific worldview without breaking the centuries-old epic: in the practical world, the chariot of Elijah-the-Prophet must give way to the electric charge, but outside the practical life, it should become a legend and take a place of honor in peasant everyday life.

When identifying how to solve the above-set tasks, we first have to consider the object of our influence — the peasant audience — in a pedagogical perspective, because its nature and features are the starting point for developing our training courses. People's lectures should be based on the ideas and concepts of the listener. When starting his course, every lecturer should mobilize all elements of the peasant experience that he needs and use them as a basis for new ideas and representations. If the lecturer forgets this basic rule, he risks losing firm ground and speaking incomprehensibly to his audience.

However, despite the fact that all the above has long been recognized by all representatives of out-of-school education, there is still no detailed analysis of the adult-peasant audience as a pedagogical object. Nevertheless, it is obvious, that this audience is fundamentally different from both children and students. In many ways, the soul of a child is a blank sheet for the teacher. It has few representations and almost no concepts or general ideas, which allows the teacher to choose the circle of representations and ideas that will become the content of this young soul and set the sequence of their perception. In other words, the teacher is free in his pedagogical plans.

The situation is different when the educator meets an already grown adult. He has limited freedom, and, in his pedagogical work, he should proceed from his student's type of thinking. In one of his conversations with agronomic students, V.A. Kilchevsky compared student and peasant audiences and identified their difference. He concluded that the student audience is exceptionally full of general ideas and concepts and, to the same extent, lacks specific representations,

whereas the peasant audience, on the contrary, is full of practical ideas and has almost no abstract concepts.

Such a difference determined two completely different pedagogical tasks for these one-sided worldviews with different types of one-sidedness. According to one of the greatest thinkers of the 19th century, "Thoughts *without* content are *empty;* intuitions *without concepts* are *blind.*" These words describe the difference in our pedagogical tasks: in one case, we have to help the blind to see; in the other case, we have to fill the emptiness of abstract representations with specific content.

It would be strange for the lecturer to a peasant audience to develop his course as a series of syllogisms based on some general idea absent in the minds of his listeners. Certainly, the more relevant way for argumentation would be an analysis of specific examples and a purely inductive approach to the general idea.

Besides the above-mentioned features of the peasant audience common to all its listeners, we should take into account its typical diversity. This is not a student audience made homogenous by monotonous preparation of the secondary school and by selection procedures of the higher education; this is not a children's audience homogenous due to the lack of life experience. This is an audience that consists of both old peasants hardened by the three-field agricultural life, foster-children of the *zemstvo* school, and experienced city industrialists, literate and illiterate, who either read newspapers every day or never read a line, etc. It is impossible to identify an "average listener" to whom to adapt your presentation, because this audience consists of separate groups that differ by readiness to listen to your words.

The experienced lecturer takes this fact into account and acts differently depending on his goals. When the task is wide, mass propaganda, he focuses on the least prepared group and either bores the more informed and well-read listeners or carries them away with an interesting form of presentation. When the course focuses on a few trained workers, the lecturer ignores the least prepared groups. Many lecturers develop their courses for all groups — repeat each section of the program twice or thrice with varying degrees of popularity and completeness; if the lecturer is experienced and talented, this method gives good results. However, we recommend, whenever possible, to divide listeners into groups according to their level of knowledge and training and to give lectures to each group separately.

In general terms, these are our tasks and the object of our influence. What pedagogical techniques should we use to enrich this object with ideas, concepts, and representations that make up the content of our courses? Certainly, pedagogy does not provide us with any universal method of giving lectures. The individuality of the lecturer, the nature of the data presented, the task of the lecturer, and, fi-

nally, the type of audience determine the choices and changes of pedagogical techniques.

Therefore, when studying how to present different issues, first we have to abandon the idea of finding a universal recipe and limit our task to the critical consideration of the existing methods for organizing courses. The most famous among them is Herbart's scheme — "formal steps in teaching": 1) preparation, 2) presentation, 3) association, 4) generalization, and 5) application.

As a first step — preparation — the lecturer reminds the audience about already known facts, he mobilizes the listeners' experience, which he needs, and connects this experience with his presentation, i.e., he prepares the basis for his lecture. The preparation step should be sufficient for the listener to remember the whole set of ideas and concepts necessary for understanding the further presentation. This step should not be too long so as not to tire the listener nor waste a significant part of his attention necessary for further and more important sections of the course. The American psychologist-educator Dewey compared the audience's holding up the process for a long time at the preparation step with a jumper who takes such a long run that he can hardly jump over the hurdle.

At the second step — presentation — our task is to enrich the audience's experience with new ideas and data. We have to be extremely choosy and economical when selecting them so as not to overload our lecture with unnecessary content, which is, unfortunately, very typical for beginning lecturers. Human memory, attention, and perceptive ability are very limited, and their overload rusts and hinders the understanding of ideas and data. For instance, lecturers make a huge mistake when they press the semester course on soil science at the Petrovsky Agricultural Academy into a two-hour peasant lecture. The amount of information presented should be both necessary and sufficient; unfortunately, only the lecturer's personal experience can provide him with a sense of proportion in giving lectures.

At the third step — association — we systematize information, compare it with the previous experience and eliminate particularities of the examples considered. This gradually leads to the fourth step — generalization of the new and old experiences of the audience and recognition of some new concepts. Thus, according to Herbart, in the first part of the scheme, the lecturer first approaches the solution of two tasks set in the introduction in a purely inductive way. Having enriched the minds of his listeners with new concepts, the lecturer has to fix them and make them effective elements of peasant thinking, which is achieved by relating them to the rest of the peasant world and by describing their application in some cases. The fifth step — application — is purely deductive in nature and completes the scheme of "formal steps in teaching".

Thus, the full scheme of "formal steps in teaching" is mainly inductive: the lecturer mobilizes his experience and accepts some new

ideas; then he generalizes this systematized and concentrated information to identify the necessary concepts and generalized conclusions. There can be (and it is often used) a completely opposite, purely deductive type of the course. At the preparation step, the lecturer reminds the audience of some general concepts and ideas, then, by a series of reasoning, he puts them into a desired form and makes some deductive conclusions that make up the subject of his course.

Two examples will be enough to prove the difference. For instance, when developing a general course on cooperation, the inductive method of presentation allows the identification of needs and hopes of the peasant economy. Then a description of the types of cooperatives, their work, and benefits of cooperation illustrates all the above with specific examples. To compare cooperative institutions with capitalist enterprises, identify the Raiffeisen and Rochdale principles and conclude by the main cooperative ideas, tasks of cooperation, its significance for social life, and its future.

This course could be organized in a completely different way based on the deductive method of presentation. First, we have to remind the listeners about ideas of solidarity, mutual assistance, and community by appealing to their knowledge and life experience, and explain the role of these ideas in different aspects of social life and in the peasant economic life. Then we should describe the benefits of mutual assistance and joint efforts in various areas of the economy together with the specific types of cooperatives. Their organizational foundations (Rochdale and Raiffeisen principles) should be deduced from the requirements of the basic ideas of solidarity and equality. We should conclude by presenting some examples of the meaning of cooperatives for meeting the needs of the peasant economy.

Another example is teaching cooperative bookkeeping. With the deductive method, the lecturer presents the ideas of economic accounting to emphasize their importance for cooperation and to explain the basics of double accounting and its features determined by the cooperative requirements. Then, to prove all the above, the lecturer explains that it is based on the analysis of the main book of accounting and its balance. This should be followed by a description of auxiliary books and, finally, by an explanation of separate notes on the phenomena under study.

The course based on the inductive method of presentation is organized differently. First, the lecturer considers some economic operations of the cooperative, identifies their key features that require registration and describes the auxiliary books needed for it. After making sure that the listeners have learned the nature and method of preparing auxiliary books, the lecturer copies all records to the main book to check the balance and calculate profitability. When analyzing the already studied data, he explains the accounting system under consideration, compares it with other systems, and concludes by

emphasizing the importance of proper accounting and the very idea of accounting in economic life.

When comparing both methods as applied to the peasant audience, we give preference to the inductive method of presentation. This is because, according to the deductive method, the lecturer starts from general concepts and ideas, which are often missing in the minds of his listeners. Moreover, peasant thinking is traditionally very specific; therefore, it very slowly perceives logical reasoning and lags behind the course of deductions of the intelligent lecturer who is used to quick logical thinking gained in his profession and training.

Peasants lack a habit of logical reasoning and abstract ideas. This has been determined by the general rule that the peasant audience follows more easily the lecturer who proceeds from representations to concepts rather than from concepts to representations. Therefore, we prefer the inductive method for the peasant audience, whereas the widespread use of deductive representations for the more highly educated audience is absolutely right and saves much time.

Critics of both methods argue that they require tremendous and active listeners' attention for they do not provide any incentive for attention or interest in the subject. For the peasant audience, this critical remark is of particular importance. When the peasant not used to mental work listens to a long presentation, comparison, and generalization or deductive construction of the general ideas, he often does not understand the logic of the presentation, becomes distracted, and turns a deaf ear to many important points of the "concentrated information".

Once I visited a lecture organized according to Herbart's full scheme: after the practical conclusion of the lecturer ("application"), the listeners demanded that he repeat the middle part of the lecture for they had not listened to it at all and did not understand its meaning, but, at the end of the lecture, they realized how important the middle part was. The critics suggest to change the logical structure of the presentation according to its aims, i.e., to begin with a clear and accurate explanation of its practical meaning and tasks, to continue with a list of issues that will be considered, and, having drawn the attention of the audience, to proceed to the gradual solution of the tasks. Certainly, the solution of the tasks can be both inductive and deductive.

In addition to the above-mentioned logical types of the course's program, lecturers often choose other types of presentation which are based not on the logical development of discussion but on other forms of connecting different aspects of the training program. One of the typical examples is a very common historical presentation, i.e., the presentation of scientific knowledge as a description of the history of science. For instance, according to one basic, biological law, individual development reproduces the development of the whole species in all its phases. Proponents of the historical method apply this

law to spiritual development and argue that for every person the easiest way to learn contemporary, scientific knowledge is to study it in the exact sequence of its historical development.

The detailed reconstruction of the history of science for presenting its foundations is often used in higher education for courses in philosophy, the natural sciences, and other disciplines, because this method has obvious advantages. It contributes to the understanding of concepts by analyzing their origins in a specific historical period, which facilitates the further use of these concepts. On the other hand, by the logical analysis of every era of scientific data and findings, the lecturer repeatedly considers the same subjects and deepens their analysis, thus, taking full advantage of the concentric teaching method.

We can recommend this method for the peasant cooperative courses too, although its meaning for a peasant audience is somewhat different from a student audience. In peasant courses, a general course on cooperation can have the following program: the beginnings of cooperation among people and animals; cooperative initiatives before the early 19th century; a history of Rochdale pioneers; development of cooperation in England; Raiffeisen and Schulze-Delitzsch; a history of cooperation in Germany; unions of cooperators in Western Europe; the power of the contemporary cooperative movement in Russia. Such a method of presentation broadens peasant horizons with new, historical and geographical representations, and lectures take the form of a curious and interesting story.

For the lecturer, such a program implies a chronological sequence of presentation, and the narrative form of lectures means less stress than logical proofs and the above-mentioned types of presentation. However, the lecturer must remember that his task is still to describe the foundations of the cooperative movement with the historical method of presentation rather than to inform his listeners about the historical development of the contemporary cooperative movement. Therefore, the lecturer should not overload his course with historical details and comparisons unnecessary for understanding the basic principles of the cooperative movement. Another limitation of the historical method is its weakness in organizing the peasant experience and in teaching logical thinking to the peasant audience.

All the above-mentioned teaching methods are based on a positive presentation of the subject, i.e., on describing and assessing its inherent features. An opposite method presents the subject by identifying its differences from other important subjects. "B is not A due to the following difference, but B is not C due to the following difference." In a general course on cooperation, this method would determine the following program: the differences between cooperative and forced unions (state and local government); the differences between the cooperative as a union of economically-individual members and the communist community; the differences of the cooperative

from other freely organized economic unions, such as partnerships on shares, joint-stock companies, etc.

This method of presentation sorts the necessary concepts by their selection and division into parts. If there is skillful practical implementation, this method ensures great clarity and understandability of the concepts presented to the listeners. However, we would not recommend this method to the beginning lecturer, because, in a boring presentation, the statement "B is not A" can lose the part "not", which would make it "B is A" in the perception and memory of the listener.

I remember from my childhood a book *Demonstrative Inconsistencies* that showed a cow at the top of a spruce, a man cutting down the branch on which he is sitting, a water-carrier with two sieves on a rocker, and so on. I do not know the benefits of this book for other children, but for many years I could not get rid of false associations that unconsciously became a part of my memory. The same can happen with listeners to a course based on the negative method (denial).

These are five types of presentation designed for the conscious perception of the subject. However, the consciousness of perception cannot be considered a necessary part of teaching. Pedagogical practice has methods for the purely mechanical introduction of concepts and ideas into the mind of listeners. A direct statement made with sufficient conviction and repeated many times often achieves greater results than a complex system of arguments and evidence.

It is believed that Napoleon said, "Repetition is the best evidence", which is fairly true, especially for an audience that is empirically minded and unable to think logically. This method is the basis of many demagogical tricks and of the power of short political slogans; thus, it would be a mistake for the lecturer not to use such a powerful pedagogical weapon for the people's audience. Such a dogmatic method of presentation is especially relevant for the first stages of cooperative propaganda., However, the principle of repetition can and should be applied within all methods of presentation, and it is the basis of the most advanced "concentric teaching method". Its main idea is that when the lecturer starts the presentation of the subject, he first describes it in the most general terms and then presents it again in more detail. Finally, having prepared listeners with two presentations and having introduced into their minds some very important concepts, the lecturer proceeds to the last detailed presentation.

A gradual presentation, repetition, and diversity of the analysis allow the concentric teaching method to ensure the most profound and conscious perception. At the final step, the audience is well prepared and understands the relative importance of each part of the course. In 1913, at the old-believers' agricultural courses at the Rogozhsky cemetery, I tried to organize my general course on cooperation on the basis of the concentric method by arranging the course in the following three stages: 1) a general presentation of the foundations of cooper-

ation by the inductive method; 2) a more detailed presentation of the basic principles of the cooperative movement by the historical method; and 3) a detailed description of the organizational forms of various types of cooperation by the deductive method. The most important issue in organizing a course on the basis of the concentric method is a different presentation or grouping of the data at each stage, because simple repetition of the already presented information, albeit in an expanded form, would be extremely boring for the audience and would significantly reduce its attention.

These are the most important types of lecture programs. The description of the concentric method shows that it allows a mixed type of presentation: the lecturer divides the course into sections and presents each by the most relevant method. However, regardless of the method chosen for the program, this very choice constitutes only the first preparatory part of work: having developed a logical program, we should still think about forms of its pedagogical implementation.

The development of the program depends not only on lectures but also on the lecturer's knowledge and skills. He has to select data according to the program, sort them, systematize them, arrange them in the required sequence and choose the form of their oral presentation. It is not enough to structure the lecture; it has to be staged perfectly. The latter circumstance is especially important, because the logical structure does not exhaust the possibilities of the lecturer. When he mounts the rostrum, the lecturer has to remember that his audience is not a mechanical perceiving apparatus; it is something alive and constantly changing. Moreover, the audience's attention is very fragile and quickly wanes. At the beginning of the lecture, it is completely different from at its end; therefore, the lecturer should monitor the state of attention, refresh it, and arrange his presentation according to the expected changes in the audience's attention.

Also, the lecturer should remember that the speed of his speech often exceeds the speed of the people's audience perception, and that the audience's perception ability can be accelerated and deepened by including visual illustrations or special techniques of verbal presentation in the oral lecture. If the lecturer takes into account all these psychological aspects, he can use some techniques to quadruple his pedagogical impact.

We have already mentioned the meaning of repetition — one of the most favorite and developed techniques of oratorical eloquence. In addition to the simple repetition of word-for-word or repetition of the same phrase, which are important for the lecturer, there is also another very common type of repetition: after introducing an idea, the lecturer repeats it in a slightly different combination of words, representations, and concepts. Such a masked repetition does not annoy the audience, it enhances perception and plays for time of the subject perception, which is especially important for the peasant audience;

therefore, this type of repetition is one of the favorite techniques of the spiritual eloquence that prevails in the people's audience.

One of the most skillful forms of this technique is a quotation that strengthens an idea by the authority of the cited author. Another type of the technique is repetition of what was just said written in chalk on the blackboard — final conclusions, names of the authors cited, historical names, dates, or some numbers.

Analogy is also a form of this technique, and it often affects the people's audience more effectively than any logical proof. It is much easier for the peasant whose thinking is not flexible and who is not used to logical reasoning, to identify the issue under consideration as related to some other issue, with similar elements that have already been solved by ordinary everyday skills, than to develop long argumentation. In general, logical evidence plays a completely different role for the peasant audience than for higher education and literature. With peasants, one has to be extremely economical so as not to overload the lecture, because the number and exhaustive completeness of the argument are less important than its strength. Therefore, the lecturer should choose two or three most convincing arguments that would be better preserved in the peasant memory than ten or twenty arguments of equal value but more boring for the audience.

It goes without saying that the sequence of arguments should ensure the constant increase in the power of argumentation; therefore, it is of no use to present weaker arguments after the stronger ones. Despite the desirability of saving arguments, their duration should be sufficient for the peasant audience to perceive them, i.e., being very convincing but too short in argumentation can be missed by the slowly perceiving peasant mind. Moreover, for the peasant audience, the power of evidence depends mainly on the emotional side of the lecture. Thus, the people's lecturer should appeal not only to the minds but also to the hearts of his listeners.

This is especially important for the cooperative lecturer. By calling for cooperation and emphasizing its necessity and usefulness, the lecturer has to enrich his audience with the powerful social energy inherent in the cooperative movement. In the souls of his listeners he has to light sparks of the great flame of the creative social activity that can lead to the revival of the Russian countryside.

However, we should always remember a sense of proportion to avoid excessive pathos and blatancy, for true pathos is a great movement of the soul, which cannot be falsified. If there is no great emotional uplift in the lecturer's soul or if he tries to imitate it, we will have only a loud lecture instead of the emotional stress of the entire audience.

Finally, we have to consider the visual staging of lectures, or, simply put, the use of visual aids by lecturers. There are many misconceptions about visual aids, so we have to somewhat annoyingly and constantly repeat that visualization of teaching is not only posters,

pictures, and other manuals but different pedagogical means for enhancing understanding and aural perception by parallel perception by other senses. Therefore, the use of visual aids should correspond to the method of presentation chosen by the lecturer for the specific audience. For schoolchildren, we use one group of visual teaching methods; in the peasant classroom, another group; in higher education institutions, a quite different group.

Pedagogy distinguishes three forms of visualization. First, natural visualization — when the teacher considers the subject and demonstrates it to the audience: the botanist illustrates his lecture with live plants, the physicist shows experiments, the geologist makes tours with his students to study the exposed surface, etc. Second, artificial visualization — when for demonstration the teacher does not use not the subject but its picture, model, scheme, etc. There are different levels of schematization: in some cases, we present all details of the subject in its picture; in other cases, we emphasize only the most important aspects and omit all insignificant details. The third type of visualization is when the lecturer illustrates his presentation not with some visual aids but by recalling from the listeners' memory their well-known images and ideas.

All three types of visualization should be used strictly according to the type of audience. The more illiterate and less prepared for abstract thinking, the closer to the naturalness the "visual aids" should be. The level of schematization can be increased only with the development of the audience's abstract thinking to enhance the impact of what is said. The ability to choose visual aids according to the type of the audience is the essence of visual presentation.

Besides these general recommendations, visual aids should be relevant for some particular tasks. Let us set aside all other visual aids and consider in more detail the theoretical foundations of the composition and use of wall paintings or posters. This type of visual aids can be divided into four groups with special tasks and, accordingly, with special requirements. The first group consists of lecture pictures and tables, i.e., graphic images that are accompanied by verbal presentation and illustrate the lecture. This group of visual aids needs no printed text. The second group consists of traditional posters, i.e., visual aids that aim to influence the audience with a purely visual image accompanied by a concisely-styled text. The third group consists of leaflets and posters that try to affect the audience by their text. Verbal presentation is partly illustrated by drawings or paintings, i.e., leaflets that are a kind of a popular brochure unfolded on the wall, and there can be no illustrations. Finally, the fourth group stands somewhat apart from the ones mentioned above and consists of different wall reference tables, such as percent tables, tables for calculating the fat content of milk, etc.

This classification proves that the tasks of each group of visual aids are extremely different; posters from one group can rarely achieve the

goals of the other group, which determines different assessment criteria for each group according to its specific tasks. In the first group, the picture does not have a self-sufficient value; both in its content and image it is determined by the lecture it illustrates, and it cannot be considered separately from the lecture. Thus, the emphasis is on the living word, and we are to consider the meaning of the lecture table only together with other visual aids used by the lecturer.

Let us set aside the demonstration of objects in kind and their simplified models due only to their significant size and focus on ordinary poster images: screen, projection lamp, picture-table, and schematic drawings by the lecturer on the board. From this list, the most powerful and vivid impression would be made by the vague picture; however, it has a number of shortcomings, the most obvious of which is its extreme transience. As a rule, the lecturer familiar with his illustrations quickly recalls the image on the screen and proceeds to the next after a few explanations. However, the listener sees the picture on the screen for the first time and needs more time to consider it carefully before proceeding to its analysis. Yet, at this very moment the lecturer finishes his explanations and removes the picture from the screen; the same happens to the second, third, and fourth picture. Thus, the attention of the listener is divided between an almost impossible perception of visual images and attempts to follow the words of the lecturer, which leaves only fragmentary representations in the audience's memory.

To avoid this, the lecturer who uses vague pictures must keep each of them on the screen for at least three minutes to spend some time on a brief description of the picture. Only after making sure that the audience has perceived the picture, should he proceed to its analysis. The perception is more complete with the table-picture that the audience can see before the lecture, during it, during the break, and after the lecture, because every listener can consider the picture several times. Therefore, it is necessary to illustrate the most important ideas of the presentation with lecture-pictures or, even better, to duplicate them on the screen.

The power of the light image is greater compared to the printed table, and it increases with naturalness (natural visualization), whereas its advantages are negligible for abstract schemes. Another disadvantage of the light image is the impossibility for parallel, simultaneous consideration and comparison of several images, which is possible with wall paintings. Finally, in the dark, the ordinary projection lights do not allow listeners to copy pictures, which has great pedagogical value.

Wall tables have such disadvantages as low brightness and lack of necessary materials on the market, which limits the choice and forces the lecturer to make this kind of visual aid himself. In most cases, the latter circumstance limits the variety of wall tables to schemes, diagrams, and cartograms. Here the light image is not superior to the

wall lecture-table, and it mainly competes with the schematic drawing of the lecturer on the blackboard.

Hand drawing in chalk (provided the lecturer is skillful) has a number of advantages: 1) it appears in a certain sequence that often corresponds to the line of reasoning, which facilitates its understanding; 2) drawing takes time and, thus, ensures the duration of perception; 3) the low speed of drawing in chalk provides enough time for copying in pencil. However, these advantages are valuable only if there are few such drawings, they are quite simple, and do not require much time; otherwise the lecturer's drawing would minimize the narrative part of the lecture and extremely tire the audience. Therefore, the experienced lecturer uses drawing only for the most important parts of the lecture and demonstrates the prepared-in— advance tables or light images for all other parts.

The same applies to the numeric content of lectures. Only those indicators for which absolute value is of great importance and a few most important numeric comparisons that should be copied by the audience should be written on the board. All the rest should be demonstrated with the prepared-in-advance tables, diagrams, and cartograms.

This combination of demonstration methods gives the best result.

To conclude our essay on the lecture visual aids, we have to warn their developers against overloading images with excessive content. If possible, they should divide their content into elementary components and provide each with a special image rather than distract or overload the listeners' attention by combining many illustrations in one drawing.

Among other types of visual aids that are not related to the methods of presentation, we will now focus on the poster, for all lecturers use it in one form or another. The theory of the poster as a complex visual aid has not yet been developed. Unlike the lecture picture based on the living word, the poster is a separate entity and independently solves a number of pedagogical tasks. First, it has to attract the attention of a person passing-by. It must inform him of a number of facts (representations) in the most clear form, combine these facts into a system that constitutes a certain position, provide evidence for this position, and, finally, affect the viewer emotionally and awaken his activity related to the position. The author of the poster has to carefully select elements for the poster that would solve these very difficult tasks most successfully.

Our agronomic experience allows us to make a list of requirements for the poster. The first and main requirement is correct content ("scientific content"), which goes without saying. However, some posters, especially for a cooperative, often make us consider this requirement. Probably everyone knows the usual type of posters that shows "the peasant economy before and after grass cultivation", etc. As a rule, such posters present the peasant economy before the re-

form in gloomy colors, but after the reform in exaggerated rainbow hues. We have to question the admissibility of such a technique. Certainly, it correctly presents the trend of the reform, but the emphasis is exorbitantly exaggerated and often unlikely.

Does this technique follow the first requirement? We would say no, if such an exaggerated comparison has an independent meaning and prevails on the poster; we would certainly say yes, if such an exaggerated comparison has an auxiliary meaning, illustrates and visualizes the poster, and draws attention to it. Thus, the well-known cooperative poster, "Remember and Do not Forget" should be considered successful and correct, because its main idea is based on the tested statements that were just visualized by some vivid comparisons of "before and after".

The second most important condition for the poster's success is its relevant content. It is desirable that the poster vividly and clearly presents some position or idea, which the viewer remembers at first glance. The poster should not be overloaded with content, because any overload prevents understanding and deprives perception of brightness and integrity. Posters should be looked at rather than considered. Their authors make a huge mistake when, "in the interest of completeness", they try to press the content of several book volumes into one poster. Such overloaded posters, for example, the well-known "World of Cooperation", look like an entertaining rebus rather than a meaningful poster. On the other hand, posters with insufficient content look empty and pale. Thus, considerable pedagogical and artistic tact are needed to find the necessary content-richness.

The third requirement applies to the illustration of the poster content, i.e., to its composition, which should not have unnecessary details. All pictures should be styled to some extent. The most important ones should be put forward and emphasized, because otherwise the peasant attention not guided by the living word can focus on minor details and miss the most important ones. I know some agronomic posters that are good examples of violations of this rule. For instance, on the poster, there is a village in a beautiful landscape, surrounded by gardens and rich in livestock and implements. Among other things, the viewer sees two piles of bags near a hut, one of which is slightly larger than the other. Beneath the picture, there is a surprising explanation in small letters explaining that it presents the impact of early plowing on yields. Certainly, this example is extreme, but we can see similar mistakes on other posters, which seems inevitable for photographs. An extremely detailed and difficult to be styled, pale, and gray photographic image is necessary for books but absolutely unacceptable for posters and should give way to the artist's colorful brush.

According to the fourth requirement, the poster as a piece of art has to follow all the rules for works of art. It should ensure the unity of artistic conception and composition, and the latter should inevitably lead the viewer to the main position presented in the poster's

content. If the design demands a combination of images or inscriptions, the compositional unity can be achieved by ornaments, the example of which we see on the well-known poster, "Successes of the Peasant Economy and Cooperation".

The fifth requirement applies to poster statements that have to be laconic, dogmatic, and with no reasoning or extensive evidence. Social agronomists should take into account the decades-long experience of commercial advertising. A laconic phrase repeated many times and accompanied by a vivid visual image affects the consciousness more strongly and deeper than a detailed and long reasoning. Statements, such as "If shells, then only those of Katyk" or many times repeated words, such as "Shustov's cognac" are a more powerful weapon of mass psychological influence than one hundred pages of thought-out logical evidence. Residents of Moscow and other big cities felt the power of the systematic propaganda by posters that were perfectly designed to promote the war loan in 1916.

However, despite the wide experience of commercial advertising, we should not identify our tasks with those of advertisers. The designer of commercial advertising aims to introduce the name of the advertised product into the consciousness and memory of the general public regardless of the means necessary to achieve this goal. He claims that his product is the best in the world and would cure all diseases; he even promises a happy married life to those who would buy a dowry from him. However, the advertiser does not claim that people believe his words; moreover, he does not need to be taken seriously. It is enough that his advertisements attract attention, because commercial advertising aims at the semi-conscious introduction of ideas into the head of the average person.

The agronomist cannot use these tricks just as he cannot use falsification and short weights. If we use exaggerations, we inevitably make them decorated like legendary, cheap, popular prints. To attract attention and enhance impression we should not emphasize the content of the poster but use auxiliary means, such as bright colors, skillful images, and so on.

Finally, to conclude our long consideration of the poster, it is necessary to mention that its content and images should be relevant for the audience and location. For instance, posters for fences on the market square should differ in design and content from posters for the cooperative board office or peasant hut walls. Posters for peasants and cooperative members should be designed differently; posters for the initial propaganda have to differ from the fancy posters statements of the Moscow Union of Consumer Societies, with which the faithful cooperator decorates his shop like the orthodox Muslim decorates the mosque with pieces of fabric with the embroidered Surahs of the Koran.

These are a few generalizations that outline the path for the further development of a poster theory. We did not consider leaflets and

reference tables, because they are not directly related to the methods of presentation. Lecturers give them to listeners after the lecture for better memorization of the material.

The issue of keeping the content of courses in the consciousness and memory of listeners is quite new and interesting for out-of-school education. Practical methods such as testing conversations, questionnaires, distribution of notes, and popular literature have a too short history to make generalizations in this field. However, the issue is important and requires a comprehensive analysis.

To conclude our essay, let us consider the preparation of the lecturer for the oral presentation of his course. All of the above describe the preparation of materials for lectures, their arrangement and systematization, i.e., the work of the lecturer before the lecture. When the lecturer mounts the rostrum, he has to creatively transform the prepared material into the living word, which is a most subtle art. As in all other areas of spiritual creativity, it is inconceivable to make generalizations here, so we present only two general positions, probably subjective in nature. First, if the lecturer selects data and visual aids according to the theoretical structure of the future lecture, it would follow only the available material, which often makes the lecturer change his plan. Second, we would recommend that skillful speakers not prepare a text but a general plan and leave the rest to one's creativity when giving the lecture. The resulting narrative roughness would be more than covered by the freshness and brightness of direct creativity.

These are the first grains of experience in the study of presentation methods for the peasant audience.

Chapter 7. Conversations, lectures, courses, and agronomic consulting

In the previous chapter, we considered in detail the methods of oral, agronomic propaganda. The exceptional importance of this issue for every social-agronomic worker makes us also consider in detail the organizational forms of this type of agronomic activity. In the search for ways for ideas about agronomic progress to enter peasant thinking, we can identify four groups of factors that can influence the mind and will of every peasant: 1) words of the agronomist addressed to the peasant personally (all forms of oral and written influence of social agronomy on the mind, will, and imagination of the peasant); 2) words of peasant neighbors on issues of agronomic propaganda; 3) neighbors who have followed some advice of the agronomist; and 4) testing the agronomist's advice in one's own economy.

To ensure the success of agronomic propaganda, it is necessary to use all these factors and organize this propaganda in such a way that the words of the agronomist will affect as many peasants as possible

and that all peasants' neighbors will talk about issues promoted by social agronomy. Also that there will be peasant pioneers who will implement the promoted actions, and that the access to seeds, fertilizers, and implement rental will be facilitated.

The forms of oral propaganda practiced by agronomists usually take into account these tasks. Agronomists try to solve them by developing specific methods for each task.

The most extensive forms of the agronomic propaganda are chance conversations at rural peasant gatherings and episodic lectures. This form of propaganda is the most widespread, affects the largest number of peasants, and, thus, should be considered a weapon of the strongest impact on the general population. However, to make conversations and lectures a mass factor, it is absolutely necessary that they involve large groups and do not consist of separate speeches in the randomly selected settlements.

We have to create a network of lecture centers so that the entire population of the region will visit them without long trips. We have to make a lecture calendar so that the days and hours of conversations are convenient for the local population. It is necessary to advertise the scheduled lectures and discussions to gather as many listeners as possible. Topics and content of lectures should be coordinated with all other social-agronomic events. Lectures on advanced agricultural machinery should be supported by the work of rental offices, exhibitions, demonstrations of machinery in operation, and agricultural warehouses. Lectures on dairy farming should be supported by the organization of tupping offices, experimental feeding, young stock exhibitions, and dairy cooperatives.

Such a series of lectures and conversations can have a significant impact on the peasant mass consciousness. However, the nature of this impact is superficial. It only prepares the ground for more intensive methods of agronomic propaganda. Moreover, lectures should be given systematically and repeatedly.

The agronomist's words first heard by the peasant audience are not perceived by its majority. Only repetitions and long discussions can ensure that the words of the agronomic propaganda will affect the peasant consciousness. One of the first Russian agronomists, M.E. Shaternikov, described the mechanism of the peasant perception as follows: "The agronomist who came to the village for the first time to promote grass sowing is usually met with distrust and shouts of misunderstanding: "We in it, in this clover, not a bite understand." "*Barins* take care of the cattle, while we have nothing to eat," etc. The agronomist should not be confused by such misunderstanding, for it is quite natural. Listeners simply do not want to think; they deny everything strange and unfamiliar. The agronomist should continue to talk, study his audience carefully, and try to find one or two attentive listeners with a spark of interest in their eyes. After the conversation, they usually come to the lecturer; if they do not, he has

to find them to talk in more detail about grass cultivation to ensure their full understanding.

Having achieved this, the agronomist can leave and then return to the village in a week or two to meet a reborn audience — one without stupid denial, still with doubts and mistrust in the use of clover, but with more specific and practical questions: "Where do we make the fourth field, where can we get seeds, etc." Such questions mean that there had been numerous debates and disputes between believers and deniers. That the questions concern the technical basis means that the agronomist will find necessary decisive arguments and specific solutions.

This is the power of propaganda among peasants as believing masters who often become fanatics of the agronomic progress. Therefore, the primary task of social agronomy is the formation of a group of such peasants-pioneers. Social agronomy strives to solve this task by organizing short agricultural courses for the most educated peasants. These courses are such a powerful tool of agronomic work that we have to consider their various forms in detail.

Practical work determines the basic types of peasant courses. Their most elementary form is a series of lectures given by different lecturers in some place for several days. This series is intended for a general audience of "everyone interested". Despite its wider opportunities compared to separate lectures, this series is still systematic readings rather than courses.

The distinctive features of courses are the same audience, practical lessons, and a kind of individualized teaching. Courses vary in content, duration, and composition of listeners. There are general agricultural courses as an elementary encyclopedia of agriculture and special courses on different branches of agriculture; five-day, two-week and monthly courses — depending on the volume and detailing of the subject and content; courses for peasants in general, for bookkeepers, cooperative partnerships, people's teachers, etc. Each type of course has its peculiarities in both goals and organization, which are described in special literature.

If we want to turn listeners of the peasant courses into future pioneers of agricultural progress, we have to pay special attention to their selection. Some agronomic workers believe that the very desire to attend courses is a sufficient indicator of peasant development and culture. They use restrictions only if the number of applicants exceeds the possible number of listeners. Other agronomic workers consider this method of automatic selection too random and unable to guarantee the social effect of the course. They suggest that local agronomists choose and recruit listeners, or that local cooperatives make up the audience by sending listeners.

Pedagogy requires a homogenous audience for it is extremely difficult to have classes in which some students can barely read, but others have graduated from a four-year, specialized school. We need a

preliminary testing conversation to sort listeners. We also know of attempts to prepare untrained listeners for the courses by group classes or by distributing brochures. The total number of listeners is determined by the ability to organize practical classes for each of them. The number of 30-50 listeners is optimal.

Great skill and pedagogical instinct are required to develop the course program. As a rule, general peasant courses are too multidisciplinary and overloaded with content. Pedagogically inexperienced agronomists try to press the four-year program of the Petrovsky Agricultural Academy into a one-month peasant course.

In the previous chapter, we considered in detail the reasons for not overloading the presentation with content. We will not repeat those considerations and note only that we do not deny the value of general agricultural courses but believe that special courses are preferable in terms of social profitability. In any event, multidisciplinary courses, in which sciences and lecturers change with kaleidoscopic speed before the perplexed audience, are unacceptable. Courses for the special peasant type of thinking should be practical. They combine general ideas that teach the peasant audience about logical thinking with such data and advice that every listener can use in his economy when he returns home. The presentation should be based on local data, i.e., the lecturer should use facts about the local reality in his evidence, examples, illustrations, and statements, but this technique should not be overused. Certainly, facts from abroad and about both agricultural and cooperative life make the presentation more interesting and broaden the mental horizons of the audience. Still, the programs of lecturers should be coordinated to avoid repetitions and omissions in the hope that some other lecturer will fill the gap.

Practical classes are an indispensable part of the course. However, they should not aim to teach someone to do something or develop some professional skills. Their goal is more modest — to strengthen the perception, because the action can be perceived in two ways: by either imagining or implementing it. The latter is more vivid and, thus preferable for a specifically thinking audience.

Let us consider the organization of lecture staff. Despite the great advantages of relying on the local pedagogical staff, mainly the local agronomist as someone who knows the local conditions, a significant part of the lectures is given by outsiders, for no man is a prophet in his own land. New faces, even agronomists from the neighboring areas, give the course a touch of novelty and festivity, which greatly refreshes the impressions of the audience.

The internal organization of the course is not well developed. According to the educators, the classes should last no more than six hours and leave some time for reading tutorials, individual reflection, and conversations with other listeners. Only these conditions ensure the normal perception of the new information — without overloading the consciousness and with remembering all the perceived. A part

of the free time can be used for general cultural development — concerts, reading books, excursions to local churches or estates, if they have historical or artistic value, etc. This form of recreation is often as beneficial for listeners as lectures.

The course should end with an evaluation procedure, a kind of examination. Some lecturers consider it unnecessary and even harmful, because after the exam the listener expects a certificate, a kind of diploma, and after getting it seeks a better place. Such an outflow of educated people from the peasant economy is the main scourge of the courses, primarily special and long courses that really provide some kind of professional training. Thus, the main goal of courses — to educate pioneers about agricultural progress in the very thick of the peasant population — is destroyed by this outflow, and social agronomy has to resist it by a very careful selection of listeners.

The most important issue is not so much testing the listeners' knowledge as consolidating it, because the content of lectures and practical classes is often learned superficially and is lost when peasants return to their everyday life. The lecturers try to prevent this by providing the graduates with lecture notes and small collections of books. However, the main form of consolidating knowledge is a constant relationship of the agronomic organization with the graduates — lecturers' visits to their households, their involvement in cooperative work, sending agricultural journals them, etc. Only when this active connection with the local agronomic staff is provided, can the graduates play the role of the second and third factors mentioned at the beginning of this chapter.

Individual consulting is also desirable, especially when the graduates try to implement the advice of social agronomy. In general, individual consultation at the request of individual peasants is a feature of the developed stage of the agronomic work. This not when the agronomist comes to the peasant and tries to gain his confidence, but when the peasant comes to the agronomist on his own initiative. Agronomists of Belgium and some other European countries with old agronomic organizations pay particular attention to this form of work, which is usually stationary. Many come and often wait in line to get advice and instructions on specific issues of their economies. The agronomist waits for visitors in his specially designed office or on appointed days and hours in some another place, such as the premises of the local cooperative or a cafe.

Written consulting is usually more widespread. In some periods of agronomic work, the demand for consulting is so great and so valued by the population that in some western regions even private, social agronomists appear.

In addition to the already mentioned forms of oral propaganda, there are also various, local, agricultural meetings and congresses. By involving local cooperative figures and members of small, regional, agricultural societies, by asking them questions about the local,

agricultural life and encouraging them to consider such issues, social agronomy creates a local, public, agricultural opinion and involves wide peasant circles in the social life. Certainly, this gives a strong impetus to local self-organized activity, and the agronomic word falls into the most fertile soil at the local, peasant, agricultural meetings, the general meetings of local cooperatives, and the economic councils of the democratic *zemstvo*.

These are forms of the social-agronomic work, in which the agronomic "tale" plays a leading role. In the following chapters we will consider forms of agronomic "presentation".

Chapter 8. Agricultural exhibitions, demonstration events, model farms, and peasant excursions

The impression made by our words and thoughts depends on the psychological state of people and on the importance for them of the issue. Quite often, useful and practical advice of the agronomist pronounced unconvincingly, boringly, and in an everyday situation does not affect the peasant's thinking because he is still not used to assessing the benefits of the agronomic knowledge. Therefore, the workers of social agronomy decided to organize presentations in forms that would inevitably attract the attention of broad peasant masses, affect their imagination, and make an extremely significant impression.

One of such forms is a mobile, agricultural exhibition, which is always a significant event for the village, a kind of a holiday that attracts all the population. The active center of the mobile, agricultural exhibition is the living word supported by many visual aids. Usually, this exhibition consists of some agricultural machines promoted by social agronomy, which are shown to visitors in operation. They also include collections of fertilizers, weeds, seeds, models, and all kinds of agronomic and cooperative posters and pictures.

Because the main feature of such exhibitions is mobility, the set of its elements should be transportable and equipped with transportation means. If the exhibition moves by rail and makes stops at stations, it should have special carriages. However, usually such exhibitions move by dirt roads and transport their exhibits by ordinary cars. Practical experience has shown that such exhibitions need their own or at least permanent horses that will be used not only for transportation but also for demonstrating machinery. This is difficult to organize with horses hired by chance. We also know of attempts to make a special wagon-rostrum for the exhibition, but they were not successful.

After the material part of the exhibition has been organized and the program of lectures prepared, it is necessary to plan the route of the exhibition, provide it with premises, and advertise it widely. When planning the route, one has to take into account: 1) villages that have suitable lecture rooms and at the same time are the center

of gravity for surrounding settlements and 2) duration of trips and road conditions. All other things being equal, if there is no agronomic work in the area, the exhibition should visit those settlements in which agronomic stations will be opened. If there is some social-agronomic work in the area, the exhibition should visit those settlements that, for some reason, are poorly served by agronomists.

The population is informed about the exhibition by wall posters, leaflets given to schoolchildren for their parents, and other notification methods. In the village, the exhibition is located either on school premises or in people's houses, where it hangs posters and arranges its collections. Machines and implements are usually shown outdoors or under a canopy, if there is one. The exhibition house and all its premises are decorated with flags, flowers, and colorful fabrics, which makes the exhibition look festive and affects the imagination of visitors.

The exhibition usually spends four to five days in one village: one day to arrange the exhibits, two or three days for visitors, and one day to pack up.

Lecturers at the exhibition give two or three lectures-talks a day, and the rest of the time they spend at the exhibition by giving explanations to visitors and trying to meet people. The topics of lectures are usually very general — "needs of agriculture", "grass seeding", "dairy cattle", "machinery", etc.

The lecturers and the agronomist — the head of the exhibition — are local agronomists and invited persons. In addition to the lecture staff, the practice determined that it was necessary to include the special manager of the economic section and permanent workers.

Lectures and exhibits usually make a very strong impression on the peasants. The task of the permanent agronomic organization is to ensure that this impression remains along with the social ties with the local population established by the exhibition. The exhibition tries to deepen and consolidate the knowledge provided by distributing lecture notes and popular agronomic and cooperative literature.

It is interesting to add some local exhibits to the mobile exhibition: the results of local agronomic experiments, crop samples, livestock, etc. By strengthening the local part of the exhibition, we gradually move from mobile exhibitions to small, regional, agricultural exhibitions, which add to the exhibits presented by social agronomy for pedagogical purposes. These include a series of contests of local producers presenting their livestock, crop products, fruits and vegetables, handicraft products, etc. At small, regional, agricultural exhibitions, the exhibits of social agronomy can be presented more fully and in more detail than at mobile exhibitions, because the former do not face transportation obstacles.

Besides sets of machinery, seed collections, fertilizers, and posters, and graphs explaining the results of regional experimental fields, some exhibitions demonstrate different models of fireproof roofs and even ways to harden ravines. Items exhibited at the contest have the

owner's address and the explanatory notes of agronomists. The special export commission examines all exhibits and identifies the best, awards their owners with honorary diplomas, valuable gifts, and often cash. The results of this examination with explanations are announced and hung out for public display.

Competitions of bulls with their young stock and competitions of dairy cows require particularly careful organization to be successful.

Besides lectures, exhibitions should have group managers who explain the significance of exhibits to the visitors.

Small, regional exhibitions have a fourfold meaning. 1) As a part of lectures and explanations, they play the role of a huge visual aid that stimulates visitors' thinking. 2) They make the local population compare exhibits with each other and with the products of their economy; instructions of the export commission develop the population's ability to evaluate the results of farming. 3) Competitions at the exhibition lead to the economies' contests, thus, encouraging economic initiative and creativity. 4) Exhibitions allow the estimation of economic assets of the region, i.e., they are a very important educational tool of social agronomy.

The main task of small, regional exhibitions is to serve as the most convincing material proof of the advantages of new, agricultural implements over the old ones. This meaning of small, regional exhibitions is very important, although it is quite superficial and not always convincing. When the visitor sees huge pumpkins and cabbages, gorgeous bulls and calves, large and full-grain wheat, he does not know the economic conditions that made such results possible. Perhaps a bag of wheat was filled by selecting the best grain in the barn by hand, or a bull was brought from abroad, and other products cost the household a fortune.

Therefore, to increase the power of our argument and to make the advantages of improved methods of farming and cattle breeding obvious and convincing, we have to show not only the results achieved but also the process of their achievement, and not only on the experimental field but also in the peasant economy. This task can be solved by special demonstration plots on peasant fields and by demonstrations of feeding cattle in peasant stalls. Agronomists agree with some peasants on using a strip of land to demonstrate the use of chemical fertilizers, early plowing, etc. The allotted land is divided into plots with different conditions of cultivation or fertilizers. The demonstration of feeding of cattle includes selection of two animals of approximately the same weight and productivity, which are fed in different ways — in the ordinary peasant way and according to the requirements of rational agronomy. The results make the advantages of the improved technology obvious.

Some agronomists have tried to organize entire model economies, but they usually required large funding, which weakened their authority in the eyes of the peasants. Moreover, their small number had

less mass impact than numerous demonstration plots easily organized and scattered across the region.

The demonstration plot mainly affects the peasant on whose field it is located. When the peasant is convinced of the superiority of the improved technology, he becomes a pioneer of the agronomic progress.

Agronomists often try to make such plots experimental rather than used for demonstration, which is why a set of them is called a collective experiment. Such an experimental approach is necessary for regions with no old experimental institutions. However, the practice proved that the collective experiment on peasant fields cannot substitute for special experimental institutions; collective experiments are a good addition to the experimental field and can transfer results to the peasant economy. Therefore, the collective experiment should be conducted and studied by experimental workers rather than social agronomists in the narrow sense of the word.

Among demonstration activities, we should also mention rental points that provide peasants with trial agricultural machinery and implements for a small fee. We will consider such rental points in one of the following chapters.

These are forms of the social-agronomic demonstration that prove the advantages of new agricultural methods. These forms also include peasant excursions to experimental fields and other agronomic institutions, to the regions of rational agriculture, and even abroad. These excursions broaden the horizons of peasant thinking and strongly affect the peasant mind, feelings, and will with unforgettable experiences. Provided there is a good organization, they become the most powerful means of agronomic influence. Certainly, these excursions are very expensive, but their value for the agricultural culture of peasants more than covers their costs.

Chapter 9. The agricultural warehouse, rental points, and grain-cleaning stations

The distribution of improved agricultural implements and machinery is one of the most important issues in the programs of social-agronomic work. Because the promotion required the provision to peasants of a reliable source of agricultural implements, social agronomy suggested the organization of the public trade of agricultural machinery and implements and to use it as an agronomic propaganda tool.

When implementing this idea, agronomists set the following four tasks for the agricultural warehouse: 1) to provide the local economy with good implements of those types and brands that are the most suitable for local, agricultural production; 2) to provide such supplies at the lowest possible prices, thus, decreasing the prices of private traders; 3) to inform the population of the new types of improved implements by supplying their economies on beneficial terms;

4) to use the warehouse and its customers as an audience for agronomic conversations and a place to meet with peasants and establish strong social ties between the agronomist with the population of the region.

Because these tasks are precisely set, comparatively simple, and ensure quick and obvious results, it is no wonder that there were *zemstvo* agricultural warehouses already in the 1860s. They became widespread in the early 20th century and replaced purchasing partnerships. Their decline has begun recently, when the strong and fully developed agricultural cooperation decided to supply the peasant economy with a means of production. However, such warehouses still function, and we have to consider the basic principles of warehousing, because there is a complex, organizational problem determined by the duality of its tasks. On the one hand, the agricultural warehouse is a commercial enterprise; if it does not make a profit, at least it has to pay for itself. On the other hand, the agricultural warehouse is a tool of social-agronomic work that is aimed primarily at peasant education. This duality determines internal contradictions in the selection of goods, methods for setting prices, and other economic decisions.

Let us first consider hundreds of goods sold in the warehouse — sowing seeds, fertilizers, and agricultural implements which are the most difficult in terms of supplies. From the commercial point of view, it is necessary primarily to have implements and machinery, which are well known to the population and are in great and steady demand regardless of their agronomic estimates. From the social-agronomic point of view, it is necessary to have only those machinery and implements that are promoted by agronomists as the best for local production and those that should replace all others.

These two tasks often do not match. Peasants demand the machines they know, even if they do not meet the contemporary, technological requirements, whereas the improved plows, sorting machines, etc., do not interest customers for years and become commercially unacceptable, shop-soiled goods. As the agronomic work succeeds, this contradiction is resolved; however, we still look for some organizational compromise. For instance, quite often the task of distributing and demonstrating brand new machines is commercially separated from the warehouse and assigned to rental points that are very desirable for every agricultural warehouse.

Another acute issue in the selection of goods is the number of types and varieties sold. Social-agronomic tasks require only the sale of basic peasant implements, which makes all other goods unnecessary. However, the peasant buyer demands that he can buy everything he needs in one shop — not only a plow, but also nails, wheel grease, files, and other small household items. Therefore, only organizational instinct and skill can help to find a necessary and sufficient compromise between trade and agronomic work.

Another difficult issue is setting prices, especially because prices in the agronomic warehouse usually determine prices on the free market. Commercial practice demands the highest charges on the costs of goods with slow, capital turnover, the smallest, shop-soiled share, and the highest demand. Social agronomy promotes the beneficial terms of purchasing new machines and implements, i.e., the goods in lowest demand and with the largest, shop-soiled share. The lack of profit and direct losses from such goods could be covered by the most popular goods, especially if the warehouse were managed culturally and pursued social-agronomic goals.

Antagonism reaches a tragic level on credit issues. The poverty of the peasantry that is accustomed to usurious, private, consumer credit requires both beneficial and long-term credit for the wide use of the promoted machinery. However, the warehouse does not have sufficient working capital to provide such credit, is unable to assess the creditworthiness of the buyer, whom the agronomist first saw, and lacks sufficient staff to collect debts from debtors scattered across tens of *versts*. Social agronomy made warehouses open wide and long-term credit, but warehousing was gradually undermined by huge arrears and the share of long-term loans in the working capital.

These drastic consequences of the credit trade gradually determined that credit was to be separated from trade and transferred from the warehouse to the *zemstvo* small-credit funds supported by credit cooperatives. In this form of crediting, the customer receives a credit order from the local cooperative or *zemstvo* small-credit fund proving that he got a loan for a specific purchase. The warehouse accepts this order for payment and receives money from the credit partnership or *zemstvo* small-credit fund, thus making a cash turnover and transferring the liquidation of credit relations to the special credit institution, which has all the means for the proper organization of crediting.

Under such organizational conditions, a very important question is who should manage the warehouse. The use of the warehouse as a tool of the social-agronomic work presupposes that it should be managed by the local agronomist. However, the warehousing development requires so much work that it cannot be managed as a side business; moreover, the best agronomists are often worthless merchants. Therefore, the warehouse should be managed by a special person familiar with trading, but the general regulations of warehousing should be set in the instructions and supervised by the agronomic board.

Some practitioners believe that in the interests of the warehouse, its manager should get both a salary and a share of turnover. In any case, the warehouse manager should not become an ordinary clerk. He must be a member of the agronomic board and is a part of the common cause as a warehousing specialist just as the grassland farmer is a meadow specialist and the zoo technician is a livestock specialist.

In other organizational aspects, the warehouse is partly similar to traditional trading companies and partly different from them. The most important issue is the method of purchasing goods. Only unions of *zemstvos* with warehouses, which can conduct multimillion operations, can strengthen public warehouses on the wholesale market, which is proved by the history of the Russian *zemstvo* purchasing partnerships uniting dozens of *zemstvos*.

The organization of credit for the warehouse is also very important. The better and easier the credit, the less working capital is needed.

Unlike the private merchant, the public warehouse monitors the situation with the machinery sold to the peasant economy. By checking the general situation of implements in its region, social agronomy seeks to establish strong ties with its customers — the owners of the implements — to study in detail their economy, the condition of the implements, and life of the machinery. The best warehouses often keep detailed customer records and sometimes conduct complex studies.

To conclude our brief description of the warehouse organization, let us consider a very pressing issue — the very possibility of the warehouse's understanding of the population needs. One agricultural warehouse working in a *uyezd* town cannot create a large client base or ensure a mass impact on the peasant economy. Many practitioners insist on the development of a network of warehouse departments with a simple assortment of goods in the very thick of the peasant population. These departments can be managed by either a local *zemstvo* employee or a local cooperative. Certainly, the latter is preferable if the local cooperative institutions are sufficiently strong and sustainable. Cooperatives are people's organizations; their management of warehousing ensures the best understanding of the peasant needs. In general, trade functions are not a feature of the *zemstvo* self-government bodies, and if sometimes circumstances force our *zemstvos* to perform them, this should be only temporary.

With the sufficient development of the cooperative movement in the *uyezd* and province, when *uyezd* and provincial unions of rural cooperatives start broad intermediary operations, the warehousing work of the *zemstvo* loses its meaning and should be transferred to cooperation. However, social agronomy should make every effort to preserve its agronomic influence on the agricultural warehouse. The cooperative supply of the population with implements and other means of production should preserve its cultural meaning and should not turn into an ordinary commercial operation.

It is necessary to say a few words about the organization of rental points and grain-cleaning stations. We believe that both should be organized on the cooperative basis, but if cooperation in the area of social agronomy is not sufficient for the broad cultural work, rental points and grain-cleaning stations should be managed by the agronomic organization.

Rental points can have a double meaning: 1) they introduce new, agricultural machines to the peasant economy by providing them in temporary use; 2) they ensure the access of the small, peasant economy to such complex machines that can be fully used only on large fields and are not profitable for the small economy where they would stand idle for most of the season (harvesting and sorting machines, root pullers, meadow plows, etc.). Social-agronomic rental points can solve only the first task. They cannot set and solve the second task, which can only be solved by a dense network of the cooperative machine partnerships. This difference of tasks between *zemstvo* rental points and machine partnerships determines differences in selection of implements and machines and in systems of payment. Whereas the machine partnership prefers complex machines inaccessible to small economies, the *zemstvo* rental point can have all kinds of machines promoted by social agronomy and accessible to small economies.

Whereas the profitability of machine use and the break-even balance of the rental point are decisive for the machine partnership and determine a complex and flexible system of rental rates, these issues are of almost no importance for the social-agronomic rental point that focuses on the first task. Certainly, when there are insufficient agronomic funds, rental rates should cover a part of the rental point costs; however, it is equally certain that these rates should be beneficial. The only exception when social agronomy takes up the second task are grain-cleaning stations, because their goal is not the promotion of grain graders or cockle separators but the supply of economies with cleaned grain. In other words, grain-cleaning stations provide the peasant economy with a technology inaccessible to small economies. This exception is determined by the importance of good seed for social agronomy and by the comparative simplicity of the technical organization of grain cleaning.

Chapter 10. Organizational work of the agronomist

Among the tasks of social agronomy, we mentioned not only the promotion of improved methods of farming and livestock breeding but also the change in the organizational plan of the peasant economy towards greater compliance with the current conditions of the economic life. It is necessary to focus on the latter, because this field of the social-agronomic work is full of disagreements and misinterpretations. The task of this chapter is extremely important and perhaps prevails over other tasks of social agronomy.

According to the basic law of agronomy, if the agronomist wants to increase soil fertility, he has to analyze the fertility factors and strengthen the factor that remains at a minimum level. When studying the structure and life of our peasant economy, we can see that many provinces suffer from the lack of an organizational plan of the

peasant economy rather than from the lack of water, phosphorus, or nitrogen. Therefore, the first task of the social agronomist is to develop the organization of the peasant economy. However, this seems to contradict the above-mentioned position that the social agronomist as a public figure cannot and should not deal with the organization of specific economies. The Russian agronomic practice rarely succeeds in reconciling these two positions.

Sometimes when the agronomist is convinced of the necessity of organizational work, he simply and unpretentiously spends all his efforts on organizing the individual economies of Sidors Karpovs, Vasiliys Mosyagins, and two or three other agreeable peasants, thus not achieving any mass effect. In most cases, despite all his efforts, the local agronomist, who recognizes the need for organizational work but wants to stay within social work cannot find specific forms of the organizational work, which makes us carefully consider the organizational activities of social agronomy.

First, we should note that almost any major technical reform, especially the introduction of new economic methods, has organizational consequences that are sometimes quite major. The early introduction of fallow on the arable land in the south of Russia deprives peasant herds of pastures and raises an acute question of foraging, which makes us think about stable keeping or artificial pastures. The introduction of grass rotation provides the economy with a forage base that often exceeds the needs of the livestock, which determines the development of industrial cattle breeding. The use of the separator provides the economy with surplus skim milk, which gives an impetus to the fattening of pigs.

Thus, technical reforms and organizational consequences inevitably change all other aspects of the organizational plan, just like a small leakage destroys the whole dam. Therefore, a system of promoted techniques, balanced and supportive of the reform of the organizational plan, is itself an organizational activity. Social agronomy examines the economic system, develops a plan for the necessary organizational changes, describes their technical elements, and puts them into practice, which inevitably restructures the organizational plan of economies.

The organizational work consists not so much of the local activities of the local, social agronomist but rather of diagnostics and planning. A typical example is the work of Moscow agronomists promoting grass cultivation in the Moscow Province. Their study of the economic structure of the Moscow village proved an urgent need for fodder grass thus enslaving terms of meadow rent, and dairy cattle breeding as a path for progressive development. The last achievement would be impossible without fodder supplies. Therefore, after the organizational analysis and identification of the desired path for organizational reform, the local agronomic workers developed and promoted a number of technical methods for fodder grass cultivation. Twenty

years of work led to the serious reorganization of the entire organizational structure of economies affected by social-agronomic propaganda. In this case, as in many similar cases, the head of the peasant economy was a reformer and organizer of the specific economy, but social agronomy gave him only the idea of reform and helped him with the organizational work.

As all kinds of organizational reforms finally determine the transition from one combination of technical elements to another, the organizational work of social agronomy will always consist of both economic and organizational development of the promoted system of technical measures. Besides the above-mentioned assistance to the head of the peasant economy, social agronomy can help him by introducing scientific methods of accounting and calculation into his economic routine.

The knowledge of measures and weights is a powerful factor of economic life, which is, unfortunately, far from being fully used by our peasant economy. Therefore, among numerous courses and lectures for peasants, courses on organizing the economy should take the main place. With the numbers that describe the economies of the peasant listeners the lecturer can easily explain to them the most important economic calculations. What are the costs of producing a *pood* of oats or a bucket of milk? Is a mowing machine profitable for the economy of ten *desiatinas*? What is more profitable — flax or oats? These are questions of agricultural arithmetic that can lead to the most difficult issues in organizing the peasant economy.

Due to the fundamental differences between the labor economy and the capitalist economy and to the poor development of the theory of the labor economy, contemporary economics does not provide objective methods for organizing the peasant economy. If we cannot provide the small producer with objective methods for organizing his economy, we have to give him the above-mentioned techniques of economic calculations, developed economic arithmetic, and basic economic concepts that would help him in the economic activity.

Given the specific peasant thinking, such a course should begin with accounting tasks for the listeners, which would help them learn basic concepts of the agricultural economy. After the listeners have learned the organizational foundations of their economies and the most important concepts of the agricultural economy, the lecturer should present a critical assessment of the current agricultural situation and identify the economic significance of the *zemstvo* agronomic reform.

A suggested program for a course on organizing the peasant economy can be as follows:

1. Family composition and its consumer budget (in kind and cash).
2. What products and how much of them should be produced for the peasant family in kind?

3. Analysis of the organization of field cultivation. Farming systems, crop rotation, and various methods for restoring soil fertility.
4. Analysis of the organization of cattle-breeding.
5. Analysis of the organization of fertilization. Fertilizing methods and norms.
6. Analysis of the organization of productive cattle-breeding. Possible types of cattle-breeding.
7. Organization of fodder production. Criticism of the existing system. Methods for calculating feed reserves.
8. Analysis of organization and methods of accounting for dead stock. The concept of depreciation. The value of machinery in agriculture. The advantages of small and large economies. The importance of cooperation for smallholders.
9. Analysis of organization and methods of accounting for outbuildings. Long-term loans, fixed capital, and short-term loans. Productive and non-productive loans.
10. Calculating the cost value of a horse's working day. Estimates of manure and other nonmarket products.
11. Accounting for field cultivation. Profitability of crops. The cost value of one's working day. The price of a *pood* of grain. Organization of sales. Market doctrine and pricing.
12. Accounting for the meadow, garden, and so on.
13. Accounting for productive livestock — an assessment of straw, payment for fodder in kind. Principles of livestock selection. Unions in cattle-breeding.
14. Consolidated balance of the economy. General organization of labor and monetary budget. Machinery. Short-term loans. Calculations of profitability per *desiatina*. The concept of rent and the origin of land prices.

Our peasants rarely keep economic records, and in most cases, the available peasant account books have only records of cash receipts and payments, which dos not allow the evaluation of the profitability of the economy. We know the very sad experience of the more cultured Western-European peasantry and have little hope that in the near future peasant bookkeeping will become mass in Russia. However, exact numbers describing the elements of the organizational plan of the peasant economy are so important for both the agronomist and the peasant reforming his economy that the organization of peasant bookkeeping and scientific analysis of its data are the key tasks of social agronomy.

Besides bookkeeping for the entire, economic turnover, there are much more successful attempts at accurate accounting for separate economic transactions, especially if accounting is of particular importance for them. For instance, the so-called "control partnerships" aim to calculate the cost of milk, the cost of a *pood* of feed in milk, and of other organizational elements in dairy husbandry. Peasant economies

unite as a control partnership and invite a "control assistant" who collects weekly data on the composition and amount of feed per cow, milk yields, and fat content. Then the control assistant calculates the cost value of a bucket of milk and a *pood* of fat and also the share of a *pood* of feed in the price of milk, which allows peasants, on the one hand, to get rid of bad cows with a high share of feed in the price of milk. On the other hand, it allows them to introduce the most profitable and rational feed rations. The well-known Danish feed standards are based on the mass data of Danish control partnerships.

The organization of peasant bookkeeping is accompanied by another method of the organizational work with completely different tasks. Contests of economies are very common in Western Europe and quite regular in the south of Russia. The winner is awarded an honorary challenge cup, an honorary diploma, some valuable or household item, and sometimes a sum of money.

The competing farms are periodically inspected by a special commission — the jury — to be described in detail for further accounting. They maintain detailed bookkeeping and are compared at the end of the financial year. The evaluation criteria depend on the goals set by the contest organizers. Sometimes the jury considers technical advantages, sometimes the gross yield per *desiatina,* or the price of a unit of labor and capital invested. In most cases, the jury's decision is based not on the objective indicators but on the general subjective impression of how the competing economies "made use of the labor forces and material means of production." At the same time, such contests provide considerable accounting data.

The main goals of the economies' contests are as follows: 1) to revitalize the creative initiative of participants, to expand their organizational experience by comparing their economy with other competing economies and by communicating with the jury members; 2) to point the rural population's attention to organizational issues and to use the results of such contests for pedagogical purposes; 3) to use the competing economies as model economies. In the following chapters, we will consider in detail the importance of model economies in social agronomy, which still have a very modest place among other methods of its work.

Thus, we considered those sections of the organizational work of the social agronomist, in which he observes, keeps account, and analyzes the organization of peasant economies and uses these data to develop a system of agronomic activities and for pedagogical purposes.

In what cases does the social agronomist become a direct organizer of economic activity? As we have already mentioned, the organization and management of individual peasant economies diffuses the agronomist's efforts and cannot have a mass effect. However, there are some cases in which the direct organizational work of the social agronomist is not a waste of effort and is of great mass importance. These include: 1) the organization of auxiliary social-agronomic in-

stitutions — rental points, grain-cleaning stations, breeding-coupling stations, experimental plots, agricultural warehouses, etc.; 2) organizational assistance to public and cooperative economies and undertakings, e.g., the organization of a dairy farm, a calf-breeding station, a cooperative seed farming; organization of the intermediary operations of local cooperatives in the sales of flax, eggs, etc.; organization of land improvement and public land management (like other organizational work, they can be done by specialized staff, but, as a part of the social-agronomic work, they should be directed by the local agronomist in full accordance with other aspects of agronomic work, especially under the reform of land relations, such as getting rid of strip farming, straightening and rounding of plot borders, etc.); 3) the most controversial and difficult type of social-agronomic work — the organization of model or experimental economies, in which the social agronomist aims not to increase the wealth of the individual peasant economy but to use it as a means of agronomic work and a kind of visual aid in agronomic propaganda.

Supporters of the third type of the social-agronomic work believe that the model and experimental economies scattered in the very thickness of the peasantry should be a living example that puts all their neighbors on the path of agronomic progress. There was a time when model economies were very popular, received a lot of funding, were generously subsidized, supplied with implements, and provided with soft loans and other benefits. Such enhanced support put model economies in an exceptional position and deprived their success of any significance from an organizational perspective. Moreover, attempts to organize model economies without such support and only with advisory assistance were not successful. Given the passivity of our population, they attracted very few visitors and, given the limited number of such economies, they had no mass impact.

For these purposes, the economies' contests are much more effective: they require fewer efforts from social agronomy, but, due to the large number of participants and public attention, they have a greater social impact. The demonstration fields, experiments, and sowing, which many peasant economies introduced to show different techniques for a small payments, were even more successful and ensured both mass scale and mass impact. However, demonstration events have nothing to do with the organization of economies. The organization of individual economies is not of great demonstration importance but is very useful as an experimental event.

Even if the program of social agronomy is based on a detailed, organizational analysis of the existing and emerging economic systems, in the organizational perspective it still has an abstract character. Therefore, it is extremely important to make its economic ideal more specific to assess its economic realizability and possible practical forms. Such a practical specification of the theoretical economic ideal enriches the agricultural experience of the agronomist and makes

him revise the program more than once to eliminate elements that are difficult to implement and to add elements revealed during the practical organizational work.

Thus, to lead the peasant economy to a new economic ideal, the agronomist should know the degree and forms of this ideal realizability. And just as there is usually not an experiment or model near the agronomic station but rather a test plot for sowing new crops and testing a new plow or sowing machine, there is always a neighbor or a whole village to willingly become involved in all economic undertakings, even if unpredictable in terms of success. In the agronomic progress perspective, this test economy or village is many years ahead of the whole district, because it develops specific forms of the new economic structure and serves as the best school for social agronomy. We use the word "school" because the agronomist has teachers. His theoretical knowledge and skills of cultural management are supplemented by the peasant's practical norms and centuries-old skills. Only their synthesis can create a sustainable form of the peasant, progressive economy.

Chapter 11. Social agronomy and cooperation

In social agronomy, there is no more important, difficult, and even painful task than "to organize the local population in unions and groups that, on the one hand, would use cooperation to provide the small economy with all the advantages of the large one; and, on the other hand, would take on consolidation and strengthening of the new economic principles." It goes without saying that the cooperative movement is of great economic importance, and that the contemporary progressive peasant economy is unthinkable without cooperative associations just as modern industry is unthinkable without capitalist forms. Moreover, cooperation is essentially important for the social development of the village.

Not so long ago, centuries-old silence reigned on our rural plains, while metropolises lived an interesting and intensive cultural life full of developing and failing systems of social reforms and stubborn struggles of various directions in the name and on behalf of the broad masses of the Russian plain. However, this life rarely affected the peasant masses, who had no voice, no creative will, and no social thought because they were scattered. The Russian people was only a *demos*, a backwoods mass, but it had to be a democracy, a self-aware people. The Russian people could not turn from a *demos* into a democracy because of a lack of organization, social skills, and organized social thought.

These basic elements of the democratic culture cannot be created by binding decrees or appear all of a sudden from nowhere. This culture is based on the long and invisible work of social forces, on the

unnoticeable but deep rebirth of the nation. The Russian Revolution revealed this truth with amazing clarity and showed that we still do not have a nation and that even the decree of the Constituent Assembly cannot turn the Russian *demos* into a democracy.

However, the researchers of Russian life discovered in the Russian village the smallest processes preparing a future democracy, and the most important such process is rural cooperation. The everyday routine work of boards, supervisory councils, and general meetings, union building, and endless debates about building a mill or selling flax created new people who would take on responsibility for the future of our country. This social meaning of cooperation is especially important for social agronomy.

We constantly emphasize that agronomic work can be successful only on the basis of people's initiative, and cooperation is such an initiative in the most organized forms. Cooperatives are centers of social relations, and, by influencing them, we can affect very broad masses. By focusing our agronomic propaganda on cooperative groups consisting of the most active and conscious rural strata, we reinforce our propaganda by the authority of the cooperative initiative. Because our propaganda affects the conscious cooperative circles that provide it with conscious support of the living word, personal examples and material assistance, our agronomic influence becomes exceptionally massive and powerful. Therefore, it is true that cooperatives are a resonator of agronomic propaganda.

Agronomic lectures at the general meetings of cooperatives, the distribution of agricultural literature through cooperatives, the organization of cooperative libraries, experimental fields, breeding-coupling and grain-cleaning cooperative stations, the cooperative purchase of seeds, implements, and fertilizers, loans for agricultural improvements, the pedagogical significance of the cooperative sorting out the joint sales of flax, eggs and milk, etc. — all of this is an invaluable help of local cooperatives to social agronomy. Without cooperatives the social agronomist can establish no organized ties with the population, without which his voice would be lonely and lost among thousands of economies. That is why almost everywhere agronomists start their work by promoting and directing the cooperative movement.

However, exaggerated forms of this work are harmful for both social agronomy and cooperation. Some agronomists develop a whole network of cooperative institutions in a region that has no prerequisites for cooperation. Thus, they acquire cooperation without cooperators, i.e., agronomists are forced to manage cooperatives almost single-handedly. By neglecting the self-sufficiency of the cooperative movement, they tend to consider cooperatives as a tool and means of agronomic assistance similar to warehouses, breeding-coupling stations, and other institutions of social agronomy. Other agronomists, in contrast, forget about their *zemstvo* service and become figures of the cooperative movement, members of cooperative boards and other

cooperative bodies, and often differ from other cooperative members only by sources of income.

Certainly, both extremes are pathological and often lead to painful conflicts under the development and strengthening of the cooperative movement. The lack of a proper fundamental demarcation between the tasks of cooperatives and self-government bodies has repeatedly led to struggles, especially in the field of cultural-educational and commercial-intermediary work. Previously, many such conflicts were determined by the distrust of democratic cooperation with the qualified *zemstvo'*. Today, after the Revolution and the introduction of the *volost zemstvo*, the task of the proper demarcation between these two democratic institutions in agronomy and other areas of the local work causes us to consider this issue in more detail.

Unfortunately, this general issue was rarely considered in our cooperative and agricultural press, and its solutions were often absurd. For instance, I have met some ardent cooperators who believed that the broad development of the cooperative movement would eventually abolish all *zemstvo* institutions. At the same time, until very recently, many members of the *zemstvo* believed that the development of small *zemstvo* units would eliminate the need to organize cooperatives.

It is obvious that both positions are wrong. There is a fundamental distinction between the work of *zemstvos* and the work of cooperatives determined by the nature of these institutions in economic life. Thus, under both — the developed, small *zemstvo* unit and the ideally developed and strengthened cooperative movement — *zemstvos* and cooperation would continue to exist. The question is how to prevent their competition in economic life and rationally separate them on the basis of their essential features.

Zemstvo is a forced union of all people living in the area; any assistance to the *zemstvo* in its economic activities consists of events and measures that would be beneficial not to Peter, Sidor, Ivan or Fedor, but to the entire population included in this forced union. Such assistance is possible only when the *zemstvo* improves and organizes, not its economic activity but its conditions. If the economic conditions are improved, every economic agent will feel the beneficial influence of the *zemstvo* work proportional to his economic activity. Therefore, the *zemstvo* aims to improve roads, organize local trade, develop public medical and veterinary care, a public network of school, out-of-school and vocational education, organize local mail, telephone communication and small credit offices that open the way for the wide financial market, etc. All these *zemstvo* activities are necessary conditions for the development of the local, national economy.

Cooperation is a combination of some aspects of economic activity. In its organizational plan, the small economy identifies those economic processes, in which a large economy has undoubted advantages over a small one, and unites with other interested economies

into a cooperative to achieve the economic scale of the large economy. The cooperative combines credit, sales, and purchase; processes potatoes, flax, vegetables, milk, resin, etc.; sorts flax, breeds pedigree cattle — in other words, rationalizes all economic activities.

Thus, although the *zemstvo*'s task is to create the best conditions for economic life, the cooperative's task is the best organization of economic activity. This is a schematic distinction of the economic tasks that is not always achievable. First, all economic enterprises including cooperatives are one of the conditions of economic life for all other enterprises. However, they are a condition by the very fact of their existence, but they do not set a task "to be a condition" and do not work according to this task. On the contrary, many *zemstvo* activities — road construction, insurance, agricultural warehousing, small crediting — are conditions of the economic activities of all economies in the *zemstvo* area and grand economic projects. Such projects aim not to ensure the greatest profit on the capital invested but rather to create the best conditions for individual economies in the area served by the *zemstvo*. Profitability of the new roadway or *zemstvo* insurance system is measured not by income (fares or insurance premiums) but by the growth of the general regional welfare determined by the use of the roadway or insurance system as conditions of economic activity.

This is the difference in incomes from organizing an economic activity in cooperative form or in the form of the *zemstvo* institution. Cooperation provides the population with incomes from those economic operations that are combined in the cooperative. *Zemstvo* economic undertakings, however, often bring greater incomes due not to a *zemstvo* enterprise turnover but to an increase in profitability in various branches of individual economies, which is determined by the conditions created by the *zemstvo* institution. For instance, the roadway increases incomes not by collecting fares but by saving transportation costs.

Certainly, the *zemstvo* often takes on cooperative functions, especially if cooperation is not developed, and vice versa — the cooperative aims to improve general economic conditions. However, the identified fundamental distinction allows an understanding of the complicated circumstances and helps answer the question of whether the agronomist should work in cooperatives.

We have already mentioned that cooperation is an economic action, because cooperatives are an essential condition of economic life. Without cooperatives, all agronomists' educational activities will be reduced to nothing. To buy the promoted implements and seeds, the peasant needs credit; to use the feed reserves of the introduced grass sowing project, the peasant needs industrial dairy farming, which is unthinkable without cooperation. That is why, if the *zemstvo* does not want to reduce its educational work to nothing, it should strive to create this necessary "condition" by promoting the cooperative idea and

organizing a network of cooperatives, which is absolutely essential for the successful educational work of the agronomist.

This is not the only task of *zemstvo* cooperative work. A network of cooperatives can become the best economic condition, only under normal and flawless cooperative work. Therefore, if cooperation is not developed, the *zemstvo* should support it with the advice and instructions of the agronomist or special instructor. The *zemstvo* should also provide good credit terms for young organizations. However, neither the *zemstvo* nor *zemstvo* agronomists should do the cooperative work; the agronomist cannot and should not replace the cooperator, board member, or accountant. Such a replacement would make the agronomist's work economic, which contradicts the basic tasks of the *zemstvo*. If the cooperative does not have members capable of bookkeeping and organizational work, the *zemstvo* should teach them the cooperative work by organizing special cooperative bookkeeping courses or by instructing. But, in no case should the *zemstvo* make its representative a cooperator, because this contradicts both cooperative and *zemstvo* principles.

Chapter 12. The equipment of the agronomic station

Almost every aspect of social-agronomic activities needs specific implements. Successful, and at the same time economical, equipment for social-agronomic work is a difficult task. Often the success or failure of social-agronomic work depends to a large extent on its material means. It goes without saying that the main condition of success is the agronomic staff, and, if it is poorly trained, then no implements will help. However, a good agronomist without good implements could do little, and most of his efforts would be wasted. When following the path of social agronomy and spending large funds to invite agronomists, self-governing bodies, cooperatives, and other public organizations should recognize that the success of their work requires no less funding for material means.

The issue of the composition of these means is poorly developed theoretically and, by its very nature, does not allow the provision of recipes. Moreover, social-agronomic work varies at its different stages. Its content changes and differs at the initial propaganda stage; after several years, at the stage of intensification in relation to the cooperative movement; and a few years later, at the stage of deep differentiation and functional specialization of the social-agronomic staff.

The differences in social-agronomic work are also determined by the economic, natural, and everyday features of its area. Thus, the implements of social agronomy in the Champagne vineyards and on the slopes of Vesuvius would differ from the implements of the *zemstvo* agronomic area in the Vologda Province or Western Siberia. However, the same general idea would determine the selection of imple-

ments for any agronomic area regardless of its longitude and latitude. Every material means of social-agronomic work should correspond to its nature, its content, and the specific local economic conditions.

That is why it is impossible to write any recipes for equipping an agronomic station or the wholesale production of implements. Commercial companies easily equip beet-sugar and other factories or select items for equipping chemical laboratories, because they know that all those processes are the same for all these factories and laboratories wherever they are located. The peculiarity and variety of agronomic work exclude such a possibility. Even if there were a possibility for the wholesale equipment of an agronomic station, a large share of funds would be spent in vain, because the agronomist would never use many of the implements and would suffer from the lack of many others.

It is unacceptable to equip an agronomic station before or at the very beginning of its work. Nobody knows in advance the content of local agronomic work. Therefore, every implement should be purchased at the very moment it is needed, so that it will be used on the next day of purchase. Thus, equipment for an agronomic station should be determined by social-agronomic work. The collection of implements is never complete, because the social-agronomic work never stops at one stage but always develops and updates its content.

Although we cannot give any general recipes, we should identify those basic principles that social agronomy worked out for the agronomist. The first step in equipping an agronomic station is to choose its location. It should be an economically and historically homogeneous area that usually consists of individual economies that concentrate around one market center. The system of the village market is an economically and socially isolated group of villages whose borders often do not coincide with the administrative regions. In most cases, the personal ties and economic and social relations of the population are limited to this little world, and our economic plans should consider it an indivisible national-economic unit. Our agronomic station should be located in the natural center of this little world near the market that every peasant would certainly visit several times a year.

Having chosen the location of the agronomic station, we have to answer the question of the facilities that are necessary for social-agronomic work, which actually consists of two questions: 1) an apartment for the agronomist and his family; 2) facilities for the social-agronomic work. The first question is beyond the scope of our book; we merely emphasize the necessity of its satisfactory solution. The necessary conditions for the successful work of the local agronomist are the guaranteed minimum conditions of everyday life. In our Russian village, it is almost impossible to find a suitable apartment for rent, so we often have to build a house for the agronomist and his family. Ufortunately, this seemingly insignificant question sometimes be-

comes extremely pressing, and we know many cases in which the agronomist left his station because of the unbearable living conditions.

The facilities for social-agronomic work consist of a reception room, an agronomist's office, an agricultural museum, and auxiliary outbuildings such as rental, breeding, and grain-cleaning stations. Finally, rooms are needed for lectures and exhibitions, which are important not only for social agronomy but also for out-of-school education, cooperatives, and other sectors of the local public work. For reasons of economy and convenience, they cooperate to develop a network of lecture and theater facilities in people's houses and schools and also to build special halls if there are no suitable facilities. When developing this network, it is necessary to identify the social-agronomic area as an optimal radius from the market center. Buildings that constitute the agronomic station should ideally form an estate near the market square as the center of local life.

For the agronomist, the issue of moving around the agronomic area is no less pressing than the issue of an apartment and facilities. Unlike the medical work station, by nature, agronomic work is mainly traveling, especially in its first years,. The social significance of the agronomist deprived of the ability to travel around his area is close to zero. Therefore, organizers of social agronomy have to guarantee their employees the complete independence of travelling. Cutting travel expenses brings all agronomists' work to nothing. Total travel expenses are usually so high that it is better to purchase a means of transportation.

Besides an apartment, facilities, and travelling, the agronomist needs some items for research and organizational work. One of the previous chapters, which described methods for developing an agronomic program, allows one to imagine the whole set of items necessary for the agronomist in his office. Its central part is the library with the most important books on natural sciences, agriculture, agricultural economy, law, all kinds of reference books, major agronomic and cooperative journals. The library should pay special attention to all kinds of materials concerning the area of the agronomist's activity. Historical and ethnographic studies of the province, works of geological, botanical, soil, entomological, and other expeditions in the agronomic area and surrounding regions, works of the nearby experimental institutions, descriptions of individual economies and areas of the region, reports of all local institutions, collections of statistical information on the agronomic area, albums of newspaper and magazine cuttings that describe local life — these are sources absolutely necessary for the library of the local agronomist.

In addition to the library, the agronomist's office should have devices and tools necessary for research. These include instruments for soil and seed analysis, chemical reagents, barometer, scales, a plant press, geodesic measuring tools, and all sorts of other items necessary for agronomic work according to the local conditions and the stage of social-agronomic development.

Finally, the third group of items in the agronomist's office consists of the research results of the agronomic staff. It is a kind of a museum of the surrounding area and holds herbariums of local flora, collections of weeds, cultivated plants, pests, soil monoliths, examples of soil, results of seed and other types of analysis, results of experiments of the agronomist, neighboring experimental fields and local collective experiments. There are also graphs and cartograms of the main economic elements of the region, which also reflect social-agronomic work.

The agronomist's office is not limited to the indoor premises and includes some meteorological instruments necessary for simple observations and a small plot for test planting and testing new machines, etc.

In addition to implements to serve the agronomist as a researcher, the agronomic station should be equipped with some aids necessary for the agronomist as a propagandist and lecturer. We have already described such visual aids, so let us make a few comments. First, the agronomic station should have lecture equipment — a projection lamp and cinematograph, collections of slides and tapes, lecture tables, pictures, and posters, a portable blackboard, tools for presenting physical, chemical, and physiological experiments, implements for the simplest analysis, models of flowers, grain ears, livestock, and so on. It should have all sorts of items for conversations and practical demonstrations, a portable set of butter-making machines, models of agricultural machines, and implements promoted by the agronomist; wall posters, leaflets, and brochures to be distributed or sold to listeners after lectures. Sometimes these items are combined into special collections to decorate the agronomist's reception room or to serve as a portable lecture set or a special, mobile, agricultural exhibition. Some agronomists designed special mobile vans for agricultural exhibitions, but this form of visual aid has not become widespread.

It is necessary to emphasize that the visual aids should correspond to the tasks and needs of the local, social-agronomic work and, if possible, be based on the local material. This rule, recognized by all practitioners, is the reason the local workers are disappointed by visual aids bought in the market that sells wholesale goods and cannot offer visual aids that reflect the local regional features. Therefore, a significant part of posters and tables is made by local agronomic workers.

To conclude our brief description of the agronomic station equipment, it is necessary to mention a regional network of small libraries of popular and reference literature on the agricultural issues, which should be organized on the basis of small agricultural societies, cooperatives, and people's houses. Agronomic libraries are closely related to the organization of library services in the village in general. Therefore, the network of agronomic libraries should be developed by agronomists in cooperation with the figures of out-of-school education.

The agronomic station often includes grain-cleaning stations, rental points, breeding-coupling stations, and agricultural warehous-

es. We have already discussed the organization of these in the previous chapters.

Thus, social-agronomic work requires diverse and numerous equipment and, thus, considerable funding. At the beginning of the chapter we mentioned that these costs are inevitable. In many cases, the needs would certainly exceed the financial opportunities, which would reduce the agronomic budget. It would make the agronomist choose between its positions and compare agronomic expenses with other branches of the economy. It is impossible to give recipes or general rules for such reductions, because it depends on the case and local conditions. However, it is better not to begin social-agronomic work at all if there is no way to provide the invited agronomic staff with all necessary material means.

Chapter 13. Registration and evaluation of social-agronomic work

We have described all basic forms of social-agronomic work and can finally proceed to its economic and social results. Unfortunately, the methodology for evaluating social-agronomic work and its results has not yet been developed. If we consider hundreds of reports of numerous social-agronomic organizations to find out the methods their authors used to evaluate their work, we would discover very diverse methods and measures of success. Some authors measure the success of social-agronomic work by the development of a regional agronomic network, by the number of rental points, breeding and grain-cleaning stations, or simply by an increase in the *zemstvo* funding of social agronomy. Other authors rely on the number of the agronomist's visits to the area and the number of conversations and lectures given. Still other authors mention the attendance of agronomic interviews, customer expansion of rental points and other stations and an increase in the demand for agronomic consulting. Some American reports compare the costs of agronomic measures with an increase in the profitability of the regional economy due to the growth in yields determined by the promoted improvements.

All methods of evaluation have different tasks and are based on different indicators. By comparing them we can distinguish four objects of evaluation: 1) scientific research of social agronomy that allows the identification of the local agricultural needs and development of a program of social-agronomic work; 2) activities of social agronomy, agronomic bodies, personnel and auxiliary institutions; 3) the social effect of these activities — the number of heads of peasant economies affected by social agronomy, their impression of agronomic propaganda, their economic activity, and the social ties between the population and bodies of social agronomy; 4) the economic consequences of the population's response to agronomic propaganda. Thus, we have to consider, on the one hand, the organizational and technologi-

cal changes that the local population makes in their economies under the influence of agronomic propaganda; on the other hand, the economic results of innovations.

According to these four objects of evaluation, agronomic reports should have the same theoretical structure as academic research reports. However, the authors of agronomic reports usually do not analyze their work and its results and merely present short protocols of their actions. Such a limitation of the tasks of the agronomic report is extremely harmful. Without the agronomist's careful analysis of his observations, activities, and their results, social agronomy would work blindly, its success would be accidental, and its failures incomprehensible and inexplicable.

When the agronomist is overloaded with all kinds of urgent work, writing a report is often his only time for undisturbed reflection on his activities and his only opportunity to break loose from the everyday agronomic routine, to look at himself and his work from the outside, and to see a general picture and compare tasks and achievements. Thus, the agronomic report is of great importance as a collection of indicators for evaluating the whole social-agronomic work.

It might seem that we contradict ourselves and set tasks for the local workers that obviously exceed their means. Often a great agricultural practitioner, who is very skillful and has a deserved, huge impact on the local population, has neither sufficient literary talent nor interest in paperwork. In other words, he is not able to write even a satisfactory protocol report. We understand this and set the task not for individual agronomic workers but for the agronomic organization as a single collective will that organizes and directs the activities of individual workers. Moreover, our requirements are for *uyezd* and mainly provincial reports, whereas reports of local workers must follow the same principles but can be limited to a good protocol as a source material for the report of the whole agronomic organization.

Concerning the methodology of social-agronomic work, its results, and reports, let us consider first the tasks of the local agronomist and then the general report of the whole organization.

Every description should begin with an accurate registration of the phenomenon. Some agronomic institutions — warehouses of agricultural implements and machinery, breeding-coupling, rental and grain-cleaning stations — have their own accounts, but the agronomist needs a diary or relies on his memory for other branches of work. Using only memory to register numerous phenomena is an unreliable path, especially in social agronomy, because our agronomists often change their locations. Because of this staff turnover, the whole work experience and knowledge of local features, sometimes very extensive, leave the agronomic station together with the agronomist, and his successor has to start all over again. He often repeats the mistakes of his predecessor and spends great efforts to collect information that was already collected. That is why social-agronomic activ-

ities and all agronomist's observations should be registered in detail and, if possible, written every day.

Besides the most accurate protocol of all social-agronomic actions, the diary should include all the agronomist's observations of the local agricultural and everyday life, his thoughts, considerations, the results of the analysis, and other facts of agronomic life. This can be a simple diary or records can be analyzed, for instance, grouped into categories. The latter allows some further analysis, for example, making a cartogram of the current agronomic work by putting on a big schematic map of the agronomic area the numbers indicating agronomic measures near the names of villages in which such measures were taken. Some agronomists even have a "file" for each village — a kind of a current report on the work in the village.

A diary and simple methods of its analysis constitute the basis of the local agronomist's report. If he wants to make an independent, detailed report, he relies on his registered observations, memory, statistical, and other local data to proceed to the monographic description of his social-agronomic work. If, for some reason, the local agronomist cannot make a detailed report, he can write a brief protocol, which is necessary for *uyezd* and provincial reports.

For the general report of the agronomic organization, the reports and protocols of local agronomists are used as source material; the main requirement is their comparability. As a rule, agronomic organizations design special questionnaires for making protocols. They are necessary even for agronomists who prepared their detailed reports, because, despite their advantages in terms of content and structure, often such reports are so different from the general questionnaire that they cannot be compared. One such questionnaire was developed by the Moscow provincial *zemstvo* agronomic organization. The Moscow questionnaire-report is somewhat cumbersome, but many of its questions are general and do not need to be asked annually. In other words, such questionnaire-reports can be (1) annual reports in the form of a protocol and (2) more complex and complete reports prepared periodically, for instance, every five years.

Questionnaire-reports, individual reports of local agronomists, reports of experimental fields and other auxiliary agronomic organizations, statistical, meteorological and other data serve as source material for the general report of a social-agronomic organization. This general report should be based on the analysis of all four sections mentioned at the beginning of the chapter. It should present the research work of the agronomist, explain tasks of the agronomic organization, describe in detail and critically analyze actions of the agronomic organization for achieving the goals of its program and, finally, carefully assess the social and economic consequences of the social-agronomic work.

A critical analysis of all four sections serves as a starting point for revising the program and developing directions for future work,

which can form a special part of the report. However, these four sections do not represent a plan of the report — they are only four elements that should be taken into account in any report plan. There is still no form for the general agronomic report, and its development is certainly a matter of practice rather than of theoretical analysis. Therefore, the general report should differ significantly from the agronomist's report by describing the work of many dozens of agronomic workers, by interpreting mass material, and by appropriate techniques, including those of comparison.

The dependence of the agronomic program and the work of agronomists on the duration of the social-agronomic work in the area, the dependence of the agronomic service on the villages' distance from the agronomist's house, a comparison of agronomic programs with the organizational plans of the peasant economies, the dependence of the peasant responsiveness on literacy, prosperity, and commercialization, a critical comparison of the success of various branches of agronomic propaganda, the mass economic effects of social-agronomic work, etc. — they all should be measured in the report with special coefficients and methods for assessing the intensity of agronomic work, its susceptibility, and social and economic success.

The most difficult part of this undeveloped method for assessing social-agronomic work is the evaluation of the economic effect. For instance, if yields grow in some province, pig-breeding develops, and the export of agricultural products abroad increases rapidly, how is this agricultural progress related to the local social-agronomic work and to what extent can social agronomy regard an increase in national income as its own merit? How many rubles did the national economy receive per each ruble spent on social agronomy? Perhaps the development of the Volokolamsk grass-sowing or Kherson black-earth fallow farming would be just as cooperative and fast without any agronomic work. Perhaps social agronomy provided only a few thousand out of a million rubles increase in the value of the Poltava crop, when only seven kopecks per each ruble were spent on it. How to answer all these questions? Where to find the necessary evaluation criteria?

The increasing profitability of agriculture is an extremely complex phenomenon determined by a huge number of reasons, and social agronomy is only one of them. It is almost impossible to distinguish its separate effect in the general result. Moreover, social agronomy aims not to create new forms of production but to accelerate the economic evolution and introduce a new economic system earlier than it would develop without the social-agronomic influence. Such an impact of the social-agronomic work complicates its accurate evaluation even more.

American agronomists tried to compare the costs of experimental fields with their benefits for the national economy. They decided to consider one of their most sustainable and obvious agronom-

ic achievements (a new, selected variety of corn, a special technique of plowing the fallow or a combination of fertilizers), they calculated the effect of this innovation compared to the old methods in dollars per hectare, and multiplied it by the number of hectares on which the innovation was applied. This is a very rough approach, but it is quite illustrative.

Certainly, there are more subtle methods of analysis such as a comparison of increasing yields in different villages with the level of agronomic propaganda influence, etc. However, they all prove only the trend but do not provide a quantitative estimate of the effect of agronomic propaganda.

In the most general terms, this is the essence of social-agronomic reports: if they meet our requirements, they turn into voluminous works that are not convenient for reading at *zemstvo* or cooperative meetings and are incomprehensible for peasants. Therefore, the social-agronomic organization should add to the extensive academic report both a short summary of its activities to be read at the *zemstvo* meeting and a popular brochure to present the social-agronomic work to the general public. The latter is certainly of great importance for popularizing not only social agronomy but also the agronomic innovations it promotes.

Основные идеи и методы работы общественной агрономии (Часть 2)[2]

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Публикуемый здесь перевод окончания книги Чаянова «Основные идеи и методы работы Общественной Агрономии» содержит главы, посвященные различным конкретным особенностям деятельности русского агронома среди крестьянского населения. Если в первых главах своей работы (опубликованной

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в предыдущем номере журнала «Крестьяноведение» 2020 № 1) Чаянов концентрировался на стратегических и мировоззренческих особенностях общественной агрономии, то во второй части своей книги он основное внимание уделяет разнообразным тактическим направлениям общественно-агрономической деятельности: методы устной, общественно-агрономической пропаганды; беседы, лекции, курсы и агрономическое консультирование; сельскохозяйственные выставки, демонстрационные мероприятия, образцовые фермы и крестьянские экскурсии; сельскохозяйственный склад, пункты проката и зерноочистительные станции; организационная работа агронома; общественная агрономия и кооперация; оборудование агрономической станции; регистрация и учет общественно-агрономических работ. Во всех этих главах и параграфах Чаянов показывает, каким творческим и изобретательным должен быть труд деятеля общественной агрономии, сколько самых разнообразных и неожиданных вопросов часто встает на его пути взаимодействия с крестьянскими обществами, аудиториями и домохозяйствами. Особый интерес здесь вызывает взаимодействие института общественной агрономии с другим влиятельным институтом — сельскохозяйственной кооперацией. Чаянов подробно анализирует, какие противоречия и какие разделения в сферах деятельности могут быть на путях взаимодействия агронома и кооператора в их общих задачах развития и улучшения крестьянской жизни. Несмотря на то что чаяновская книга опубликована 100 лет назад, она по-прежнему представляет не только исторический интерес, но содержит много ценных мировоззренческих ответов и практических рекомендаций и для современных работников агроконсалтинга и активистов сельского развития.

Ключевые слова: общественная агрономия, крестьяне, сельскохозяйственное образование, аграрная реформа, сельскохозяйственная кооперация