ADULT AGRICULTURAL EDUCATION NEEDS ASSESSMENT FOR THE
DMITROV DISTRICT - RUSSIAN FEDERATION

James J. Connors, Assistant Professor
Department of Agricultural and Extension Education
The University of Idaho

Outstanding Research Presentation
This paper is one of five outstanding research papers from the Eleventh Annual Meeting of the
Association for International Agricultural and Extension Education, Little Rock, Arkansas, U.S.A.,

Abstract
This needs assessment was conducted during the summer of 1994 during the researcher's Farmer-
to-Farmer assignment in the Dmitrov District - Moscow Oblast - Russian Federation. A survey
instrument translated into Russian was administered in face-to-face interviews with private farmers
and agricultural workers. Respondents were interested in adult agricultural education seminars
covering agricultural mechanics, animal feeds and nutrition, animal health and many other topics.
Recommendations were made to the National Educational Methodology Center for conducting
adult agricultural education seminars with citizens in the Dmitrov District.

Introduction
Russian agriculture is currently going through drastic changes. The recent breakup of the
former Soviet Union has left State and Collective Farms in a state of limbo. Many people who
used to work for the state and collective farms are seeking to start their own private farms.
However, other people without any prior agricultural experiences are also interested in
entering farming. As a result, most of these "private farmers" need education about new and
innovative agricultural practices.

The National Educational Methodology Center (EMC) in Novosinkovo Settlement, Dmitrov
District is the organization that is delegated by the Ministry of Agriculture to provide
educational curriculum in agriculture. Another part of its duties is to offer non-formal adult
education programs for people in the Dmitrov District. In order to better determine the types of
adult education needed for private farmers and others interested in agriculture a needs
assessment was necessary.

Theoretical Base
The need for adult education in agriculture is world-wide. Curle (in Finley and Price, 1994)
advocates that An developing societies. . .
significant attention should be given to the
enhancement of education in agriculture" (p.
279). Curle goes on to state that adult education
in agriculture should "give the cultivators
themselves as much education in agriculture as
possible, both through extension work and,
where feasible, through short courses of
instruction" (p. 279).

Every adult education program in agriculture
should have an expressed philosophy. Diamond
(1987) identified three functions that need to be
addressed in planning international adult
education programs in agriculture. Diamond
stated "the third function is to introduce modern
agricultural concepts by using the indigenous
talents, skills, and natural resources already in
place. Such concepts should address the felt
needs as expressed by a nation's populace" (p.
23).
Prawl, Medlin and Gross (1984) stated "Up to two-thirds of the people in most developing countries live and work in the rural areas. Most of them depend on agriculture for their livelihood as either laborers, tenants, landowners or employees or owners of agriculture-related industries" (p. 150). As the Russian Federation increases the distribution of land formerly farmed by State or Collective Farms to the new breed of private farmers there exists a growing need for education in new technological advances in agricultural production. Borg and Gall (1983) defined need as "a discrepancy between an existing condition and a desired set of conditions" (p. 753). They went on to say "Educational needs can be assessed systematically using research methodology. This type of evaluation research is important because assessment of needs provides the foundation for developing new programs and for making changes in existing programs" (p. 753).

In a similar study by Long and Luery (1994) conducted with private farmers in Uzbekistan it was recommended that teams of farmers be chosen to participate in short courses in agriculture. The researchers suggested that on-farm demonstrations and experiments be used as a means for instruction. The study also found that teams of faculty members representing the state university, Winrock International and specialists from the United States be used to teach short courses in agriculture to the Uzbek farmers.

As a part of developing this theoretical framework for this needs assessment a conceptual framework was developed. This conceptual framework identifies the factors that affected the needs assessment. Figure 1 shows the conceptual framework for this study.

**Purpose and Objectives**

The purpose of this needs assessment was to determine the types of adult agricultural education seminars needed by the residents of the Dmitrov District - Russian Federation. Specific objectives included:

1. Determine the educational background of residents of the Dmitrov District.
2. Determine the agricultural topics that are of interest to the residents.
3. Determine the residents' ideas for seminar length, location and instructors.
4. Provide the Educational Methodology Center with recommendations on seminar planning for 1995.

**Methodology**

The methodology used for this study was a survey instrument administered during personal interviews with the respondents. Due to the limited public mail service and the poor quality telephone system in rural Russia, face-to-face interviews were selected as the means for administering the needs assessment instrument.

A rough draft of a needs assessment survey was developed after consulting with agricultural education professionals at both the National Education Methodology Center and the adjacent Yakhromsky Agricultural Technicum (college). The rough draft was checked for content validity by officials of the National Educational Methodology Center. As a result of their recommendations, several questions were reworded and three questions were added.

The final survey was translated from English to Russian and contained 18 questions. The survey was administered to farmers, agricultural workers and other interested parties during visits to farms in the Dmitrov District during July 1994. No attempt to generalize the results beyond the individuals who responded was made.
Results

A total of 24 completed surveys were completed by individuals in the Dmitrov District. The largest percentage of respondents, 54.2% were private farmers. Figure 2 shows the place of employment of respondents. Objective 1 was to determine the educational background of respondents. The mean number of years of general education was nine. Most respondents had very little formal education in agriculture. The mean number of years of formal agricultural education of respondents was three. Respondents were also asked how many years they had been employed in agriculture. The mean number of years of agricultural employment was 13.25. The length of employment ranged from 1 month to 43 years. The largest percentage, 66.6%, was male. Table 1 shows the age of respondents.
Objective 2 of the needs assessment was to determine the agricultural topics of interest to residents of the Dmitrov District. A list of 12 common agricultural topics was developed and included on the survey. Respondents were asked if they were interested in each topic. Respondents circled "yes" or "no" for each topic.

Table 2 shows the number and percentage of respondents who responded "yes" to each topic area. The topics are listed in descending order of interest. The topics receiving the most "yes" responses were agricultural mechanics and animal health/veterinary care.

Table 1

<table>
<thead>
<tr>
<th>Age of Respondents</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>36.7</td>
<td>16</td>
<td>59</td>
</tr>
</tbody>
</table>

Table 1

Private Farmer
54.2%
13

State Farm/College
8.3%
2

Other
37.5%
9
Table 2

Agricultural Topics of Interest to Respondents

<table>
<thead>
<tr>
<th>Agricultural topic</th>
<th>Number Responding &quot;yes&quot;</th>
<th>Percentage responding &quot;yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural mechanics</td>
<td>12</td>
<td>50.0</td>
</tr>
<tr>
<td>Animal feeds and nutrition</td>
<td>12</td>
<td>50.0</td>
</tr>
<tr>
<td>Animal health/veterinary care</td>
<td>11</td>
<td>46.0</td>
</tr>
<tr>
<td>Dairy production (including goats)</td>
<td>11</td>
<td>46.0</td>
</tr>
<tr>
<td>Crop production</td>
<td>10</td>
<td>41.6</td>
</tr>
<tr>
<td>Beef production</td>
<td>9</td>
<td>37.5</td>
</tr>
<tr>
<td>Glass house plant production</td>
<td>8</td>
<td>33.3</td>
</tr>
<tr>
<td>Gardening</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>Agricultural business management</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>Swine production</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>Equine production</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Sheep production</td>
<td>3</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Objective 3 was to determine respondents’ ideas for seminar length, location and instructors. Respondents were asked the best season to hold the seminars, the best time of day, the best day of the week, the length of the seminar in hours/day and total weeks.

An overwhelming majority of respondents indicated that winter was the best season of the year to hold the seminars. The best time of day was afternoon or evening. Respondents indicated that any day of the week was fine. The ideal number of hours per day was three or four. Respondents indicated the seminars should last for about four weeks. Respondents were asked to indicate the best location to hold the seminars. The National Educational Methodology Center, Yakhromsky College and Yakhromsky Farms, as well as, any other location were possible seminar sites. The largest percentage of respondents, 34.8%, indicated Yakhromsky College or other places, such as local settlements, were the best locations for the seminars. Table 3 shows the data for location of the adult agricultural education seminars.
Table 3

Suggested Locations for Adult Agricultural Education Seminars

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yakhromsky College</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td>Other locations</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td>National Educational Methodology Center</td>
<td>4</td>
<td>17.4</td>
</tr>
<tr>
<td>Yakhromsky Farms</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Residents of the Dmitrov District indicated which methods of instruction they preferred.  Methods listed included lecture, laboratory exercises, video tape presentations, and slide presentations.  The method receiving the most positive responses was laboratory exercises.

Table 4 shows the number and percentage of respondents who responded "yes" to each topic area.  The methods are listed in descending order of interest.

Table 4

Instructional Methods Preferred by Respondents

<table>
<thead>
<tr>
<th>Instructional method</th>
<th>Number responding &quot;yes&quot;</th>
<th>Percentage responding &quot;yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory exercises (hands-on activities)</td>
<td>19</td>
<td>82.6</td>
</tr>
<tr>
<td>Video-tape</td>
<td>15</td>
<td>65.2</td>
</tr>
<tr>
<td>Lecture</td>
<td>14</td>
<td>60.9</td>
</tr>
<tr>
<td>Slide presentations</td>
<td>9</td>
<td>39.1</td>
</tr>
<tr>
<td>Photographs</td>
<td>9</td>
<td>39.1</td>
</tr>
</tbody>
</table>

The respondents were asked who they would like to see teach the seminars.  Possible teachers included: visiting professionals such as farmers, teachers, or experts from other countries, teachers from Yakhromsky College, specialists from EMC, and visiting professionals from other Russian agricultural technicums.  The group receiving the most positive responses was
visiting professionals such as farmers, teachers or other agricultural experts from other countries. Table 5 shows the number and percentage of respondents who responded "yes" to each group. The preferred teachers are listed in descending order of interest.

Table 5
Instructors Preferred by Respondents

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Number responding &quot;yes&quot;</th>
<th>Percentage responding &quot;yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visiting professional from other countries</td>
<td>17</td>
<td>73.9</td>
</tr>
<tr>
<td>Visiting professionals from other agricultural technicums in Russia</td>
<td>13</td>
<td>56.5</td>
</tr>
<tr>
<td>Specialists from the National Educational Methodology Center</td>
<td>7</td>
<td>30.4</td>
</tr>
<tr>
<td>Teachers from Yakhromsky Technicum</td>
<td>4</td>
<td>17.4</td>
</tr>
</tbody>
</table>

Conclusions
Based on the findings, the following conclusions were developed:

1. Individuals contacted in the Dmitrov District of the Moscow Oblast have a genuine need for non-formal, adult agricultural education seminars. Topics identified as the most important include agricultural mechanics, animal feeds and nutrition, animal health/veterinary care, and dairy production.

2. The majority of the individuals completing the needs assessment indicated the agricultural education seminars should be held at the Yakhromsky Agriculture College or at on-farm locations in local settlements.

3. Laboratory exercises, video-tapes and lecture were the methods of instruction preferred by respondents, respectively.

4. Visiting professionals from other countries or agricultural technicums in Russia were indicated as the most desirable instructors for the seminars.

5. A series of adult agricultural education seminars was planned and recommended to the National Educational Methodology Center. Steps are being taken to implement these recommended seminars and identify participants, facilities, instructional methods and instructors.
Educational Importance

As more and more private individuals start farming in the Russian Federation there will be a growing need for adult educational programs in agriculture. Instruction in basic topics such as agricultural mechanics, animal feeds and nutrition, and animal health and veterinary care is needed. The need for adult agricultural education will have a direct impact on land-grant universities in the United States. Technical specialists and educational professionals will be needed to develop and teach non-formal educational programs for adult farmers in countries such as Russia. The next decade will be significantly important as private farmers in the Russian Federation and other countries develop their agricultural expertise and join the rest of the world in the global marketplace.

Bibliography


