Farmer`s preferences for farm extension service

Insights from a discrete choice experiment in Kosovo

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Outline

• Introduction of the study
• Objectives
• Methodology
• Current status & ongoing work
Introduction

• A large amount of agricultural budget goes to direct payments;
• Several studies have claimed that the current agricultural policy in Kosovo, specifically direct payments are not achieving their objectives (GAP, 2016; INDEP, 2016; Bajrami, 2017;)
• Investigating what farmers want is important to understand how they will react to a policy change and also important for budget allocation – future budget planning;
• For a successful policy design, the better knowing of farmer`s preference is necessary;
• Important to evaluate, what should a policy contain, what features are important, in order to be successful and increase uptake by farmers;
Objectives of the study/ research questions

• Main objective = Provide policy makers with quantitative measures of the relative importance of different policy characteristics that can influence uptake;

➤ Would farmers trade off an restructured extension service with reductions in direct payments?
➤ How much of the direct payment farmers are willing to trade for nonmonetary incentives;
➤ How much farmers would be willing to pay for an improved extension service?
➤ Examine the importance of different attributes when farmers make policy choices; Which characteristics of the policy are important for uptake and how farmers value different attributes of this policy?
➤ How do individual characteristics (socio-economic characteristics) affect preferences?
Methodology

- Discrete choice experiment (DCE)
- The selection of attributes and their levels was consulted with the literature, and based on focus group discussions and interviews with farmers and other stakeholders;
- Testing of the experiment with farmers;
- Six attributes with 15 levels in total;
- In the end, a fractional factorial design with 36 choices divided into 4 blocks of choice sets was derived from R;
- Each farmer will have to answer one block of questions=9 choice sets;
- A stratified random sample among FADN farmers
### Attributes | Description | Levels |
--- | --- | --- |
**PERSONAL FIELD VISITS** | The number of personal field visits (live contacts) from the extension agents. A personal field visit implies a direct visit in the farm, where the farmer has the opportunity to interact directly with the extension agent. | • Zero visits included.  
• One visit included per year.  
• Two visits included per year; |
**EXPERTISE ACCESS** | The access to what type of expertise. General expertise implies basically access to an expertise which is generalized, where advisors are generalists and offer general advices in different fields, such as, pesticide application, livestock management, subsidy application, grant investment schemes etc. Advisors are usually agronomists with general agricultural knowledge. Contrary, the access to specialized experts offers an opportunity to receive advice from specialized experts. This means that depending on the issue at stake, the farmer will get advice from a specialized person in that field. For example, if the farmer is facing an issue with plant protection, he/she can contact an expert specialized in plant protection. If he/she faces a problem with milk quality, he/she can contact a dairy specialist. Advisors are specialized experts with specific knowledge on different agricultural sub-sectors. | • Experts with general farm expertise (General advices);  
• Experts with specialized farm expertise (Specialized Advices); |
**FARM DEMONSTRATIONS** | Farm demonstrations on specific sub-sectors offered with the aim to increase professional capacities. Farm demonstrations will be organized in small groups and will be covering specific topics/ issues in different agricultural sub-sector. Each sub-sector will have their own farm demonstrations. For example, farm demonstrations can cover topics such as: management of mastitis disease, handling of milking machine, pruning, spraying, etc. | • Included;  
• Not included; |
**YEARLY RATE (Euro)** | The farmer will have to pay for this service. Prices on the right represent these tariffs as annual rates that needs to be paid by the farmer. | • 50 Euro Annual rate (low rate);  
• 75 Euro Annual rate (medium rate);  
• 150 Euro Annual rate (high rate); |
**EXTENSION SERVICE APPLICATION (ICT Platform)** | ICT platform will offer access on several features through an application that can be accessed by a smart phone, tablet or home computer. You can ask the expert directly by sending your questions with text or picture, and receive an answer by an expert in your specific sub-sector in less than 48 hours. You can access the farmer’s forum, where different topics are discussed among farmers, lead farmers and others. Another feature are notifications for production. Farmer to receive notifications for their farm operation, such as optimal periods for planting, crop rotation, management of soil fertility, plant protection and weed management, animal health, product quality management and other best practice production related activities. Another feature of the system is weather information, weather forecast and receiving notifications in cases of bad weather, such as warnings for hail. In addition, provision of early warning systems about diseases, pest problems, etc. It will also offer information regarding the sector on real time. | • Included;  
• Not included |
**DIRECT PAYMENTS** | Direct payments that the farmer is currently receiving or are currently offered in the sub-sector where he/she is operating. | • Stay the same;  
• Cut by 50%;  
• Cut completely;
How are we doing it?

• Enumerators all over Kosovo
• Enumerators use the manual to conduct the experiment
• Paper based survey

STEP BY STEP
1. Warm up questions
2. The hypothetical re-structured extension system is explained to the farmers
3. Attributes are explained separately to each farmer
4. Cheap talk is used
5. Real Choice cards
6. Post survey regarding choice cards
A sample of a warm up choice card

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk yield per day</td>
<td>15 liters</td>
<td>10 liters</td>
<td>None of these</td>
</tr>
<tr>
<td>Breed (race)</td>
<td>Holstein Friesian</td>
<td>Mixed</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Country of origin</td>
<td>Germany</td>
<td>Kosovo</td>
<td></td>
</tr>
<tr>
<td>Price (£)</td>
<td>1,700</td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>
## A sample of a choice card

<table>
<thead>
<tr>
<th>B1Q3</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm visits</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
<td></td>
</tr>
<tr>
<td>Expertise Access</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> Specialized</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> General</td>
<td></td>
</tr>
<tr>
<td>Farm Demonstrations</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> X</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
<td>None of these</td>
</tr>
<tr>
<td>Yearly rate</td>
<td><img src="https://via.placeholder.com/150" alt="Price" /> 50€</td>
<td><img src="https://via.placeholder.com/150" alt="Price" /> 75€</td>
<td></td>
</tr>
<tr>
<td>Phone Application</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> X</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
<td></td>
</tr>
<tr>
<td>Direct payments</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> Stay the same</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> -50%</td>
<td>Cut by 50%</td>
</tr>
</tbody>
</table>
Pictures during data collection
Pictures during data collection
Preliminary results

– Up to date, the experiment has been conducted with 40 farmers
– What is driving the selection of choice cards?

1. Farm visits
2. Expertise Access
3. Direct Payments

– Bigger farmers tend to worry less regarding choices with higher prices;
– The number of opt outs is higher among small-scale farmers;
Thank you!

Questions and suggestions?