Thematic Group
Smart & Competitive Rural Areas

1st Meeting
Brussels, 18 November 2015

DRAFT REPORT

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Contents

Introduction

The opening presentation had the objective of: i) putting the work of the Thematic Group (TG) in the wider context of current ENRD activities ii) illustrate the scope of the TG and its expected outcomes; iii) clarify the purpose of the first meeting and define the topics of follow-up meetings.

Key messages from the presentation:

- The TG is part of wider ENRD activities.

- A number of ENRD activities (ongoing or planned) are part of this work stream and link with the work and the expected outcomes of the TG. Namely:

- A series of **workshops** drawing on the experience of participants, and drawing on Contact Point **inputs** – RDP analysis, good practices and thematic expertise

- The focus will be on creating **output**s using Contact Point dissemination channels – Rural Review, a Thematic Group Seminar, Report, Workshops, NRNs and participant outputs

Further reference: TG Presentation prepared for the Rural Networks Assembly on 26th November 2015

The scope of the presentation was to provide the framework for the following group discussions. It summarised key outcomes of the meetings of the Rural Networks' Assembly and Steering Group which provided indications of the **priority themes** for EU Networks in 2015 and the following years.

Key messages from the presentation:

- Key areas identified by the Assembly and Steering Group which could be developed in this Thematic Group include:
    - **Empowering advisory services – Knowledge transfer – Broader innovation**
    - **Local food – Short Supply Chains – Rural-urban partnerships – Small farms**
    - The cross cutting themes of ICT and Rural Broadband and Strategic and Integrated Funding
- These themes were condensed into three discrete topics for discussion by the first Thematic Group:
- Smart Agriculture
- Smart Supply Chains
- Smart Villages

Interactive Session 1: Smart Agriculture

Four discussion tables were set up around the same set of questions (see left column). Groups were then asked to share and comment on each other's findings. The following is a summary that takes into account recurring issues emerged during the group discussions.

The first round of discussions focused on identifying **key needs** and **challenges** for **Smart Agriculture**.

Key needs and challenges

The feedback session from the four discussion tables on the key needs and challenges highlighted a number of topics that have potential for further discussion.

1. **Smart Farming** was accepted as a method to improve livelihoods and sustainability, but there is a need for a change in practice and in mindset among farmers to bring this about. Need consistent knowledge of practical solutions, and new methods for smaller farmers to be able to adopt systems.

2. **Bring together advisory services**: Creating a network of advisory services and knowledge systems – incorporating up to date specialist knowledge such as smart agriculture.

3. **Networking and Cooperation**: enabling collaboration from small farms to large, and both peer-to-peer and larger scale networking, including internationally to share best practice. This also includes other actors with input into the rural environment, including researchers, and those with advice and information.

4. **New technologies** can be transformative, but there is a need to make these more widely known, including practical examples of their use and application at differing levels and particularly the effectiveness of these tools in remote rural areas.

5. **Sharing technologies** can be an effective way of managing resources between farmers, using producer groups and

cooperative arrangements which share the machinery or technology and the requisite knowledge to apply them in an efficient and sustainable manner.

6. **Big data** can be valuable for farmers, particularly in enhancing market understanding of consumer and customer needs. The challenge is understanding how to access and use the data appropriately, and the appropriate knowledge systems to support the application and analysis of data.

Intervention

Advisory Systems

Tom Kelly (Teagasc)

The discussion was then followed by a short intervention on Knowledge and Advisory systems in Ireland, and the need to develop relationships both between research and advisory systems, but also at the peer-to-peer level on farm, where farmers themselves can be encouraged to share best practice.

RDP Analysis

Elena Maccioni (ENRD CP)

Analysis was presented on RDP uptake of measures and focus areas, and the variation. A large number of member states prioritise focus area 2A - Farm performance, restructuring & modernization, using measures 1, 2 and 16, meaning that they are combining knowledge transfer and innovation, advisory services and the cooperation measure.

Group discussion

What are the approaches and examples for Smart Agriculture?

The discussion then focused on the approaches and examples that participants could bring on the topic. The examples presented in the feedback can be grouped under the same headings as before:

1. **Smart Farming** approaches multifunding through thematic clustering, and examples include the use of innovation brokers and facilitators. Reference was made to the Solinsa project, and to quality assurance as a motivation for Irish farmers.

2. **Advisory Services** examples referred to the ProAKIS study, and to the need to identify gaps in advisory services and deliver training on specific themes (such as the application of precision farming) and on innovation and added value.

3. There were a large number of suggested approaches and examples in **Networking and Cooperation**, including the creation of an inventory of networks related to innovation and demonstrating inspiring practices, complemented by real networking exchanges and visits; peer to peer schemes for rural businesses (farmers, producers, enterprise agency, etc.). It was

suggested that LAGs may be able to act as or facilitate innovation brokers (bringing together research institutes and farmers). Examples were given from Finland of networks for sparsely populated areas, and in using ICT students in Knowledge Transfer, and in Spain farmers using precision technology to minimize or eliminate water pollution.

4. The approach for **new technologies** suggested that these may be channeled through innovation under Measure 16, including pilot schemes. Examples include the use of Good Practices and Knowledge Transfer. CEJA have over 1000 good practice examples available.

5. Examples of **sharing technology** include support for practice-based conservation agriculture issues such as carbon stocking and soil quality in Italy and Ireland. There are approaches such as shared platforms, but also shared physical resources such as machinery rings in the UK, where both the farm machinery and the operator are shared between farms.

6. **Big data** approaches include using results for training, benchmarking and for decision making processes. This can provide a link to advisory systems, and help improve efficiency and marketing. Other potential uses include animal tracking and monitoring climate impact. Examples of use presented included carbon calculators and animal tracking in Ireland.

Interactive Session 2: Smart Supply Chains

The second round of discussions followed the same format as the first round of discussions focused on identifying **key needs** and **challenges** for **Smart Supply Chains.**

Key needs and challenges

The feedback session from the four discussion tables on the key needs and challenges again highlighted a number of topics that have potential for further discussion.

1. **Market opportunities** were highlighted as a key area for progress. This was expressed as matching supply and demand by some participants, but the needs were articulated as defining demand and adapting producer capabilities to feel the needs of those opportunities. This means defining 'smart supply chains' and the clear market needs, including the role of quality systems.

2. **Adding Value:** This had wide ranging applications from converting traditional supply chains to using new technology, and included enabling small farmers to use their competitive advantage in local markets.

3. **Developing Farmers' Markets:** considering the next stage in development whether through efficiency or cooperation. This may be in considering other avenues and markets for local foods, including the enhancement of the experience at markets.

4. Finding **new routes to market**: how different approaches to the market can impact on producer incomes, including newer development areas. The strands that were mentioned were extending short supply chains (including larger producers and groups), public food, direct marketing and business to business.

5. **Labelling** was also put forward as an issue – making sure that

origin and product quality are represented, and the market expectations and demands on labels, making sure the advice and information is up to date.

Intervention

Producer Groups

Clemens von Doderer (CEPF)

The discussion was once more followed by two interventions - a presentation on producer groups, including the value of promoting local food and the opportunities for collaborative development. There was also the need to recognise the market channels that may be emerging, and the value to the consumer of quality assurance and regional specialization.

RDP Analysis

Elena Maccioni (ENRD CP)

Analysis was again presented on RDP uptake of measures and focus areas. Focus area 3A is on agri-food integration and quality. Most of the RDPs use a wide range of measures to deliver this, although the delivery is mostly based on two Measures, Measure 4 and Measure 16, which are active for 55 out of 76 RDPs activating Focus Area 3A.

Group discussion

What are the approaches and examples for Smart Supply Chains?

The discussion then focused on the approaches and examples that participants could bring on the topic. The examples presented in the feedback can be grouped under the same headings as before:

1. Approaches for **market opportunities** include using platforms (including the web) to connect supply and demand, examples of which include 'Agrilocal' in France and e-platforms in Romania for local food, and using cooperatives as a platform in Germany. The NRN can also act as a portal for market information.

2. **Adding Value:** The use of advisory systems and specialist support was advocated here, in supporting producers to define their USP. Quality systems can also support added value as a point of differentiation. One example cited in Spain was a programme to improve farm produce quality and to promote this.

3. **Developing Farmers' Markets:** The approach here was looking at improving the whole value chain for short supply chains, and developing and promoting direct sales (Spain) or developing web-based systems (Ireland).

4. Collaboration was seen as an important means to support **new routes to market**: working collaboratively with producer groups,

or with chefs and restaurants, using producer groups to access markets such as public food in Spain, or in Belgium being smarter with the organisation of the supply chain using a system called Belorta.

5. For **labelling**, the examples given were using 'local' labelling in Germany and in Scotland, which enhanced product sales

Interactive Session 3: Smart Villages

The third round of discussions had the same discussions focused on identifying **key needs** and **challenges** for **Smart Villages** and due to time constraints the presentations were made first, and the discussion also considered **approaches** and **examples** (as with the first discussions)

Intervention

Georgios Mathioudakis (DG Agri)

The session started with an outline of areas for potential work, and the role Broadband Competence Offices in each country was briefly presented prior to lunch – this highlighted the joint initiative to develop rural broadband in each of the member states with each country having an office to support development. This will be complemented by a central office in Brussels coordinated by DG Agri, DG Connect and DG Regio.

RDP Analysis

Elena Maccioni (ENRD CP)

The final presentation of RDP Budget analysis was made after lunch. The main point noted here is that while the main support for this will be under Focus Area 6C – Digital Services and Rural Broadband, many of the approved and analysed RDPs (57%) were not activating measures related to this. Those who were predominantly (99.2%) did so under Measure 7.3 - *Support for broadband infrastructure, including its creation, improvement and expansion*

Group discussion

What are the key needs and challenges, approaches and examples for Smart Villages?

Key needs and challenges, approaches and examples

The feedback session which took place after from the four discussion tables on the key needs and challenges again highlighted a number of topics that have potential for further discussion.

1.   Creating **Smart Villages** delivering quality services was raised in the feedback, as this can help retain youth in rural areas and attract urban populations. There is a need for greater networking to change local government mentality to innovation and to understand tourism demand.

   Approaches in this area include creating an inclusive approach, creating services for the community and for tourism. Examples

cited were the 'Dark Sky' tourism project in Portugal and youth LEADER projects in Hungary.

2. **Digital Services and Rural Broadband:** there was a recognized need for developing rural broadband, and using this to connect small communities, and to develop smart schools. This can be supported by ICT training and improving infrastructure.

   Using existing infrastructure can support this, including the renovation of old buildings, such as renovating windmills in Latvia, or making rural schools and SME premises the rural hub for the community. In Ireland social media is increasingly used for community connections.

3. **Connecting different sectors** can contribute to improving the image of rural areas and creating diversification and attractions.

   Networking can improve support to rural entrepreneurs, and examples include using LEADER to develop an integrated approach, including universities and networking across sectors (Portugal). Another example from Scotland was through businesses working together to create rural strategy.

4. Creating a **Shared economy** is an approach where complementary skills are developed, shared and valued.

   The approach undertaken can consider inclusion with those with 2nd residences in rural areas, with youth and other demographic groups – in other words recognising community contributions and skills. An example was put forward of a 'stock market for skills' in Germany.

Session 4: Where can Rural Networks add value?

After the conclusion of discussions, the final session of the day looked to conclude with what next steps can be taken, and the priorities for delivery for Rural Network, and sought to identify some key topics for discussion at follow-up meetings of the Thematic Group

The session started with two presentations – one on Precision Agriculture, including outcomes from the EIP-Agri focus group, and the second on market opportunities, which also reflected on the key opportunities raised in the EIP-Agri Short Supply Chains focus group.

Presentation

Precision Farming

Christiane Kirketerp de Viron
(ENRD CP)

The presentation on Precision Farming raised a number of outcomes, including the importance of integrating tools into farms and cooperatives, and developing modern farm management systems. There is a need for independent advisors and for the further development of calculator tools to create appropriate benchmarks. There was also recognition that small and medium sized farms may need specific tools appropriate for their budgets and needs.

Presentation

Market Opportunities

Moya Kneafsey
(Professor of Local Food Systems, Coventry University)

The presentation on Market Opportunities reflected the outcomes of the EIP focus group. This included highlighting the benefits of Short Supply Chains for rural areas, including resource sharing, maintaining food infrastructure, and jobs creation. The re-localisation of economic development and supporting resilient and sustainable agriculture.

A number of opportunities were highlighted, including the development of public procurement in food and drink, the development of food hubs and the benefit of collaboration for small-scale producers.

Presentation was also made of the opportunities for smart villages, which built upon the theme of combining resources, bundling cultural and creative resources together. This incorporated the notion of creating an experience economy oriented towards the creation of memories, unique tangible and intangible experiences.

The conclusions in the presentation were that a number of options are possible, but that collaboration is vital to make them succeed,

particularly in remote rural areas. This can combine traditional and contemporary skills including technological innovation and social innovation.

What are the key needs and challenges, approaches and examples for Smart Villages?

In the final discussion, participants were asked to put across any preferences or final comments. One of the points raised was the need for recognition that the theme should go beyond 'smart' and recognise the value of competitiveness to the overall theme.

Annex 1 – Discussion Grid

Smart Agriculture: Key needs and challenges, approaches and examples

What are the key needs?	*Where are the challenges?*	*Which approaches can be used?*	*Where are the examples?*
We need to define what is meant by 'Smart': find new niches and link it to technology; it must be sustainable, environmentally friendly and reduce food waste	It needs a mind change, including education, and ensuring sustainability; there is a lack of knowledge on the topic	Change the mentality by considering the funds as instruments, creating a multifund strategy through thematic clusters	EU Solinsa project includes examples of innovator brokers and facilitators; organic farming coops share sustainability knowledge; Irish farmers are motivated by Quality assurance impact
Sharing knowledge in advisory systems and knowledge networks; cooperation among advisors, both nationally and internationally.	Bringing advisory information and best practice together	Identify gaps in advisory services and deliver thematic and innovation training;	ProAKIS study
We need to network and cooperate more effectively: collaboration among farmers (exchange between different types of farmers: e.g. small and large farms), foresters and technological centres, academia. There is also a need for international cooperation, and a need to focus on some more neglected areas/stakeholders (e.g. small farms, mountain areas)	We need good connections, including rural broadband, and to enable access to ICT (for example in the forestry sector); needs investment. Better access to FADN systems and analysis (by researchers) for efficiency gaps	Creating an inventory of networks related to innovation and networks demonstrating inspiring practices. Real networking exchanges and visits; peer to peer schemes for rural businesses (farmers, producers, enterprise agency, etc.) LAGs as innovation brokers (bringing together research institutes and farmers) Link different farmers (small farms and large farms) on efficient use of existing resources/equipment/ small-scale technology/energy	Networks for sparsely populated areas and using ICT students in rural villages in Finland; Spanish farmers using precision in cereals for reducing water pollution, use sonar to repel animal attacks and mobile App to plan work with tractors efficiently so that reducing carbon foot print.

We need to raise the awareness of new technologies, and who it can serve. Need for information on results, efficiency – through examples	Informed advisors and business support, making sure we can introduce the smart concept in areas of rural decline, remote areas	Support for training in innovation and for rolling out Measure 16; Using LAGs to introduce innovation in rural areas	Using best practices, social media, KT tools – CEJA have 1000 social media followers using good practices and results
We need to share technology, for example shared machinery and smart use of resources; need technology to reduce our carbon footprint	Using producers organisations for technology transfer and sharing, and also cooperation between producer groups	Support practice-based conservation agriculture Specific issues: updating tools on precision farming ('what precision farming can bring to you?') - practices/ alternative use of side-products; minor crops – use of fertilisers	Using Member State communication examples. Italian farmers looking at carbon stocking and soil quality. Ireland using 'carbon navigator' Exchange platform between young farmers on how to use fertilisers (CEJA) – if they see the results they will use it themselves Support for practice-based conservation agriculture (carbon-stocking, quality of soil, etc.)
Access to big data is key for precision farming	Last mile solutions for farmers in accessing the market	Using results to guide achievements, holistic use of big data – benchmarking and decision-making (involving advisors), improving efficiency and for marketing, tracking animals Linking various issues/policies, e.g. climate change & farming practices	Cattle Breeding Federation tracking animals (lifetime info); Irish dairy companies using information for decision-making Carbon-navigator (Ireland): a tool that farmers can use to benchmark/improve their practices/ quality assurance

Smart Supply Chains: Key needs and challenges, approaches and examples

What are the key needs?	*Where are the challenges?*	*Which approaches can be used?*	*Where are the examples?*
Matching supply and demand, especially in rural-urban exchanges, and in local markets. Understanding demand and markets in the context of globalisation	Defining 'smart' supply chains, reducing the effects of distance to market. Facilitating the connections and raising awareness of demand and how and where to deliver products. Information is needs on quality systems and measuring demand.	Using platforms to connect supply and demand, providing market information on the NRN website	Agrilocal (France); Using cooperatives as a marketing platform (Germany); focussing on training and information systems in Murcia (Spain); e-platform for local food in Romania
Adding value to products, increasing specialisation and improving quality schemes.	Converting traditional supply chains; Make small farmers use their competitive advantage in local markets. Using Cooperation Measure to develop activity and new approaches, using new technology	Direct sales and defining Unique Selling Points (USP) e.g. local, organic, etc.; making sure there are national quality schemes (including for local food); advisors trained in food processing and what can be produced at farm level	Improving and increasing the quality of products and of farms and promoting this (Spain)
Making farmers' markets more efficient – defining the next stage of their development and organisation	Improving the efficiency of existing farmers' markets (e.g. more exchange about experiences, etc.) Developing new avenues for local food – farmers' markets are only one approach. Public foods can provide a direct connection, as can restaurants	Look at the whole value chain for public food, and encourage greater urban-rural links	Promoting direct sales in Spain – farm shops, shorter circuits and fewer intermediaries; creating web-based systems in Ireland and niche markets
Finding new routes to market – direct links, public food and new production methods. Short supply chains are not just about benefitting farmers	Understanding all the strands – B2B, B2C and B2PA and the importance of logistic to access new markets. Understanding the full supply chain including storage and efficiency solutions	Encouraging collaboration among chefs, public food providers and supermarkets with local food suppliers, providing a minimum level for local food supply (e.g. 30%)	Using farmers associations to support Public Food (Spain); Belorta in Belgium is an example of smart organisation of the supply chain

Labelling – information of food quality (origin, production).	Defining quality – information about production Up-to-date information is needed that the market can often provide (e.g. on quality, production, etc.)		

Smart Villages: Key needs and challenges, approaches and examples

What are the key needs?	*Where are the challenges?*	*Which approaches can be used?*	*Where are the examples?*
Creating smart villages – for both the community and visitors to the area	Delivering quality services, retaining youth in rural areas and attracting urban population; changing local government mentality to innovation; understanding tourism demand	Networking to support rural tourism; creating an inclusive approach; creating services for the community and for tourism	Hungary – LEADER projects on youth involvement; Dark Sky tourism attraction (Portugal)
Digital services and rural broadband, infrastructure requirements at the rural level – taking a coordinated approach	Creating smart schools; training in ICT, delivering broadband in remote rural areas; connecting small communities using broadband	Reusing older infrastructure; using schools and rural SMEs as the broadband hub for the community	Latvia – renovating windmills; Ireland using technology and social media for community connections
Connecting different sectors for an integrated approach	Defining critical services, changing the image of rural areas; creating diversification and attractions	Providing 360 degree support for rural entrepreneurs. Using networks to link diverse sectors.	Using LEADER to develop an integrated approach; Using universities and networking across sectors (Portugal); businesses working together in Scotland to create strategy
Creating a shared economy	An inclusive approach where skills are developed and shared	Considering inclusion with 2nd residences, youth and other demographic groups – recognising community contributions and skills	Creating a stock market for services (Germany)