Expert Advisory Committee Meeting summaries

The Academic and Business Advisory Committees of the Project on Enhancing Innovation in Rural areas carried out two meetings to gather advice on the initial stages of the project on 3 and 5 June, 2020 from 3-5pm. The meetings involved the majority of confirmed members of the advisory committees and approximately 30 additional attendees including OECD colleagues and delegates who came as observers.

The full list of nominees is available at the end of this document. For the purpose of promoting open discussion, Chatham House rules were applied to the meeting. The following summaries are the generalized discussions. While not all views were uniformly agreed upon, those listed below provide the general discussions and advice provided from the Expert Advisory Committee to the OECD Secretariat gathered during the course of the meetings.

Academic committee (3 June 2020, 3-5pm)

The way we understand rural development and innovation in rural areas is important to consider thoroughly. The current framing for rural economics overlooks the fact that much of innovation and progress in rural areas that is difficult to account for. This in turn influences how key performance indicators are measured, how policies are elaborated, and what we determine as successful policy-making. Part of the issue of how we measure and elaborate recommendations on innovation policies in rural areas is due to *how we understand rural areas*, and the other part is *how we understand the impact and measurement of innovation.* From the perspective of rural and innovation experts, improving or changing our evaluation from a production-function approach to one focusing beyond GDP and individual well-being may considerably improve the way we look at innovation and development in rural areas.

There is a push from academic group to shift the focus from capturing innovation through patents and R&D spending, to focusing on *the propensity to innovate, the characteristics of innovators, framework conditions, networks, and social innovation*. We are encouraged to resist the bias towards technology innovation. This, in turn, should also be reflected in policies for diversity and inclusion and inclusion in innovation & entrepreneurship. A few suggestions were to focus on incremental innovation, small versus fast innovation, innovations in product outputs, innovation in firm processes etc. For some types of innovations, the fact that firms are in the periphery is useful (slow innovation), for other types the interaction with others is very important. Because of limitations in capturing innovation *per se*, it was recommended to make an approach focused on *framework conditions for overcoming some of the geographical barriers* that rural areas face when promoting or participating in innovative activities. This is primarily related to access to knowledge, connections and networks between firms and institutions, and complementary linkages when possible.

Furthermore, expanding our work beyond looking at innovation (as an outcome), to firm performance, competitiveness, and indicators of social welfare (meaningfulness) beyond GDP was discussed to quite lengths. While rural areas do not have all the benefits of

agglomeration economies, the advantage of rural areas include several non-GDP related benefits that are frequently overlooked in production-function analyses. For a people-focused well-being approach, we are advised to avoid only looking at firm performance and standard measures of innovation as outcomes, but to focus on individual welfare and the social innovation.

Lastly, there is a consensus that the use of several of the standard tools for measuring innovation in rural areas do not adequately capture economic activities and innovation as well as they do in urban areas. In particular, patents and R&D investments are problematic because of compositional issues, and relevance. Focusing on social welfare requires us to reconsider our standard framework of analysis. A number of suggestions were given by the advisory committee, some of which suggested the use of micro-data sources, big data, web-scrapping and surveys.

Recommendations from Academic Committee:

Policy Focus:

- Focus on social innovation in addition to innovation
- Focus on drivers of innovation and well-being outcomes
- Move beyond GDP in measurement tools
- Look at framework conditions and networks
    - Focus on regulation, financing and connectivity (Human interaction, market access, inequality)
    - Focus on role of subsidies

Measurement:

- Go beyond patents to understanding who inventors are
    - Focus on a better denominator for per capita (patents/occupations that patents alone)
    - Focus on supply of inventors/entrepreneurs who innovate and their skill sets
    - Propensity to innovate, be an entrepreneur or experiment
- Use trademark data when possible
- Consider the use of GVCs, trade and product data to get incremental innovations
- Consider the use of mobility and network data
- Consider web-scrapping for internet speeds to have a proxy for broadband connectivity
    - Post-code upload and download speeds
    - Cloud computing adoption in rural areas
    - Google
    - Mobility data
- Consider looking at connectivity and networks of human interaction including c-suite level mixing

- Consider using ISIC numbers to determine firms and people who work in several industries at the same time.
- Consider using occupational classifications to determine people who work on several occupations at the same time.
- On a territorial level, consider co-location of manufacturing and knowledge intensive business services.
    - Co-location and co-creation
- Gather information or metric of policies that incentive the innovation promotion types of investment for policies as enablers.
- Consider the use of e-commerce surveys
- Consider secondary markets for technology and resource/re-selling
- Consider firm growth rather than firm performance
- Consider time-use data as in WB report on India and a few European countries.
- Consider a focus on inequality
- Consider using World Management Surveys
- Consider the "demand for innovation"
- Consider subcontract of intellectual services

Business Committee (5 June, 3-5pm)

Firms and individuals in rural areas face many challenges that those in more dense areas do not. It is because of this, that firms in rural areas have different needs and have shown different degrees of agility and adaption to some of the challenges they face. We should work *on harnessing the comparative advantage of rural areas rather than trying to duplicate what happens in urban areas*. For example, one cannot incubate in rural areas as silicon valley is incubated. Firms do not have access to the same community of venture capital. Rather than focusing on venture capital, we can focus on how rural firms can provide services for other firms and support output through innovation in their services to medium and large firms.

People and firms in rural areas are driven differently than those in more dense areas. This is reflected in the different management and organizational tools that are used in rural firms that promote *horizontality* and how individuals and firms adapt to the fact that there are less financial and network opportunities. Young entrepreneurs do not have the same goals as older ones, and the way in which businesses are run in young rural firms is not always focused on making the most profit, but also on social goals. The 21st century firm is becoming a hub, and young entrepreneurs in rural areas are leading the way.

There are a few key areas that we should focus on to support development of people and firms in rural areas, these include access to capital, education, talent, housing polices, cluster specialization, and networks, within an eco-system of regions. Importantly, Entrepreneurs looking to establish and grow businesses look for networks and collaboration to increase visibility and networking. This is a key reason why entrepreneurs want to come to incubators and be associated with other firms. Initiatives to build eco-systems with accelerators, co-working places, collaborative software, and work-place arrangements.

There are growing opportunities in e-commerce and entrepreneurship that close some of the traditional gaps improving access to supplies and markets. Narrowing the gap in access to final mile service provisions, creating networks of users and service providers, and encouraging a culture of education and human resource training can help create an enabling environment to address some of the common market failures such as access to technology, access to markets, digital skills, internet connectivity and capacity of firms to understand how new resources are used.

Administrative simplicity and *low administrative barriers* are important for firms in rural areas. In addition to common market failures, there are administrative complications, complicated terminology, limited contextual focus and multiple layers of government that make it particularly difficult for rural and small firms. Often firms in rural areas are either squeezed to find alternative solutions, or do not benefit from the same resources as competitors in more dense areas because of such barriers. At least one of the easy ways we can solve this is by making it easier for firms and individuals to comply with regulations, for example through digital tools. For young entrepreneurs, there is also scope for intergenerational mentoring and support in the development of trade skills.

More advanced technologies are already being implemented in some networks and are on the horizon in service delivery for education and health in rural areas. This includes virtual reality in education provision, and drones and self-driving cars for good transportation and delivery. However, accessibility and quality of infrastructure and, in particular, fast broadband infrastructure is still a barrier for the last-mile delivery. Improving broadband and infrastructure services reduces this barrier. Furthermore, the use of solutions that some of the new innovations can provide can alleviate some of the traditional disadvantages of less dense areas. An example of this is the use of 3-D printers to help speed up or replace goods in the supply chain.

Because firms are changing, we should also change the way we measure performance and determine successes in innovation or more generally in business. This includes changing management practices. The future of work in many firms are set to change. 50% of firms that receive VC funding, according to a recent study, are increasing work from home arrangements. Venture capitalists are now moving away from the focus on revenue as a key performance indicator towards firms that are promoting sustainable growth and social innovation. How one determines whether a firm is success is changing.

We should be wary of looking at budgets for R&D and R&D as a percentage of sales. If they do not have R&D expenditure, they are usually status quo firms who still innovate, but without the intent to patent. *Furthermore, firms with too many innovation projects in place are problematic as it demonstrates more of an anti-competitive nature of inventing and patenting, rather than innovations that sure a society purpose*. While disruptive innovations are hard to measure (and sometimes not immediately identifiable), many innovations are scalable, but often not patented. It comes down to time-use and the culture of innovation, with an important part of innovation driven by immigration, the promotion of the culture of experimentation, and openness towards the learning from around the world. In some cases, some of the most disruptive innovations do not initially have a clear path towards profitability, but may bring new connects to social issues, and eventually transform into solutions. This is the difference between problem solving and value-creating approaches. Finally, patents are low on the list for how we measure innovation, even though it is one of the most frequently used indicator. There is often an headquarter bias, and it inadequately captures social innovation and innovation processes in rural areas.

Recommendations from Business Experts Committee:

Policy:

- Local co-ordination mechanisms for networking with other businesses and peers
- Local co-ordination in shipping and transport
- Local co-ordination for resource hubs, including tools and education services.
- Describing business support programs should show more contextual understanding of how a program directly benefits firms, for example the Giga-bit Scheme in the UK, and the R100 project (voucher scheme) for broadband in UK.

Measurement:

- UPS tracking: Those who have a UPS truck going to them, probably has a small business.
- Time-use allocation as a KPI
- Culture of innovation as a KPI
- R&D v no R&D firms
- Immigration as a source of innovation
- Method on “jobs to be done” (HBS)
- Distinguish between slow and fast innovation
- Distinguish between initiatives that have a social purpose and others

Table 1. Academic Expert Advisory Committee

Name of nominee	Affiliation
Akcigit, Ufuk	University of Chicago
Asik, Gunes	TOBB University of Economics and Technology
Bollman, Ray	Brandon University
Brouwer, Aleid	University of Groningen
Coyle, Diane	University of Cambridge
Crescenzi, Riccardo	London School of Economics
Cukier, Wendy	Ryerson University, Diversity Institute
Destefano, Timothy	Harvard Business School
Fluharty, Chuck	Rural Policy Research Institute (RUPRI)
Giuliani, Gianluca	Flury-Giuliani
Maloney, William F.	World Bank
Mayer, Heike	Bern University
McCann, Philip	Sheffield University
McCoull, Ian	Scottish Enterprise
Okudo, Atsuko	International Telecommunications Union
Radosevic, Slavo	University College London
Rodriquez-Pose, Andres	London School of Economics
Roper, Stephen	Warwick Business School
Scherer, Roland	University of St. Gallen
Shobayashi, Mikitaro	Gakushuin Women's University
Van Leeuwen, Eveline	Wageningen University
Wojan, Tim	National Science Foundation

Table 2. Business Expert Advisory Committee

Name	Name of Firm or Association
Baylac, Charlotte & Serban, Asinetta	Amazon AWS
Bentovim, Lyron	Glimpes Groupe
Campillo Alonso, Juan & Lopez-Barajas Huder, Gonzalo	Telefonica
Clarke, Richard & Alvarez, Amy	AT&T
Cobb, Zita	Shorefast
Craigie, Jane	Rural Youth Project
Cruz, Genero	GSMA
Dejus, Didzis	Baltic 3D
Dobson, Alastair	Arran Dairies & Scottish Manufacturing Advisory Board
Dunne, Matt	Center on Rural Innovation
Erni, Jon	Miaengiadina
Falcone, Cristina	UPS
Gagne, Marie	Synchronex
Giuliani, Gianluca	Flury-Giuliani
Haan, Nicholas	Singularity University
Heery, Daniel	Cybermoor
Johansson, Niklas	LKAB
Jones, Doug	Ignite Atlantic
Kittridge, Teresa	100 rural women
Nykänen, Ikka	Bussiness Joenssu
Oram, Oliver	Chainvine
Primmer, Nicole	BIAC
Rossi, Maurizio	Hfarm
Toufani, Amin	T-labs
Varza, Roxanne	Station F
Yanaka, Shugo	INSPIRE