The review of dissertation thesis (oponentský posudek disertační práce) "Innovation Models and Their Application for Developing Countries: Case-Studies from Agricultural (Cattle) Development in Rural Kazakhstan" (author Ing. Saida Teleuova)

The thesis is in line with contemporary discourse in rural studies — i.e. it addresses innovations and their links with knowledge and institutions in rural areas and agriculture. As such, the thesis echoes existing institutional paradigm in these studies. The biggest asset of the text is in-depth literature review. The whole body of the thesis works with various types of literature and tries to juxtapose and confront various views of the authors. It is not an easy work because such an approach is close to a review type of the paper and the review papers usually develop already experienced academicians. Such circumstances mean that the biggest asset of the thesis can be also viewed as its biggest jeopardizing challenge. It is because the author who just completes her Ph.D. degree cannot obviously handle with such an experience as somebody who works in addressed area for many years. It accounts for some shortcomings which I will point out now together with highlighting positive elements in the thesis.

As I have already indicated, the biggest asset of the thesis is the work done in term of literature review - for instance, the outline of exogenous and endogenous models of rural development is well done. I understand that the author cannot embrace all existing theories on innovations (I miss, for instance, Geels's transition theory which is used to address innovations, knowledge a institutions in rural issues; similarly I miss also any reference to path-dependency if investigating institutional development). However, the literature review suggests the author is able to work critically with large amount of existing knowledge, which is one of the learning outcomes of Ph.D. studies. Nevertheless, also the literature review brings some questions and problems that need to be addressed in my review. The text sometime uses concepts or terminology which is not explained in terms what do they mean. For instance, page 25 speaks about social capital but the concept is not explained at least in one sentence or in brackets (moreover, if already the "Introduction" section speaks about innovations and cooperation – it pushes a reader to expect some more work with social capital theory). Such kind of the problems, I am referring to, does not rest only in the term of social capital. Another example is page 98. It speaks: "growing recognition of SSFs adaptive capacity". What SSF does mean the text does not explain at all. Another evidence is the term transaction costs, for instance. I have an impression the author plays a sort of power-play with the readers assuming they have the same knowledge as she has and there is no need to explain used term or concepts in a logical and needed way. Another example is the triple helix – the concept is firstly used on page 10 to show some works using this concept but to get the explanation what does it mean a reader is able only from page 11. Such a style of writing results into the questions some of which I will ask at the end of this review in order to concert my understanding with the understanding an author (questions starting "How to understand...").

Sometime I had a feeling (I apologize I operate with the term feeling in my comments) that an author wastes time of analysing the theoretical concepts not used latter in the empirical research. For instance the page 20 refers to entrepreneurial universities or academic firms. What is the role of university start-ups or spin-offs in Kazakhstan in this context? I have not found any long discussion about this issue in the empirical sections of the text; therefore I asked myself why these concepts are mentioned in review in details. They are important concepts but they are not addressed by research done by an author therefore it looks like wasting the time.

Semi-conclusions in the text are very good idea but sometime they are just a summary of what has already been presented in the text instead of bringing new information and new knowledge based on the analysis done.

Although I was quite critical up to now, the literature review is not the biggest problem of the theses. As I pointed out several times, I appreciate it. The biggest problem is, in my view, the disproportion between empirical research section and the whole body of the text. I assumed larger and more information generating case studies. Also the research methods should be more diversified. For instance, documentary study used could be extended into discourse analysis or content analysis. Such an extension would generate more information enriching the text. Research questions (pp. 8 and 45 - by the way they are not worded in the same way - is there any reason for different research questions?) are rather descriptive. There should be more puzzle type research questions as well (not only describing what is going on but explaining why something is going on). An example illustrating my comments is Table 8. It is highly descriptive and provides only the context. The latter analysis should, at least, present some comparison, if not using advanced statistical procedures for an international comparison to find out the reasons of the detected problems. On the other hand, the author explains the situation reflected by the table, however, the explanation is not evidence based. I have already mentioned problems resting in case studies. I am not sure, if Case study 1 is in all its sections case study per definition - it should describe and analyse the case in all its details. On the other hand they are case studies otherwise they will be not able to present such findings like: "Newly established farms still cannot afford to hire competent specialists to carry out inspections of quality production in their own farms."). Generally speaking, I expected more direct quotations from the interviews with considering what do the quotations mean (analysis of the interviews). The sentences referred in the text are highly interesting. Especially in Case study 2 (like in the statement "farmer of old Soviet school..."). It should be more such sentences analysed to explain their meaning. If doing such a work the case studies will be less descriptive and more explanatory (even page 44 speaks "research is an explanatory study").

I think the most important finding is to be found on page 70: "Small-scale farms often do not have a chance to get government support, but nevertheless their dynamism in the market shows their ability to accept new market conditions and trends." It is an interesting paradox (small scale farms are dynamic even without a government support). Can you explain it? Such explanations would be extremely needed for the work and would make it to be really excellent even to publish some of its results in highly ranking journal like Journal of Rural studies or Sociologia Ruralis. Now I would recommend to go with publishing into Eastern European Countryside journal published in Torun (Poland). Similary, an interesting conclusion is on page 86: "They believe that investments in agriculture cannot deliver sustainable and sufficient revenue that could service repayment rates. Only a small number of respondents think that there is a lack of access to sources of finance that prevents them from borrowing." Can an author confront the statement with some of existing theories?

Last paragraph already presented some questions for the discussion. Here are the other ones:

How to understand the sentence "Kazakh universities are still fully financed from the budget of government..." (p.18)? What about the students who study above the quota funded by the government? They do not pay for their studies and the fees are not an income of the university?

How to understand the sentence "Knowledge based economy contributes to political economy..." (p.19). The concept of political economy is not explained earlier therefore it is difficult for me to understand how knowledge based economy contributes to political economy.

How to understand the difference between citizen centered and public centered QH model (page 57-58)

How to understand the number of farms in Kazakhstan, especially the agricultural enterprises? What does an agricultural enterprise mean in Kazakh context (the text refers to average size of agricultural

enterprises 4,378 ha). The text on pages 67-68 is confusing: "There were 7,687 registered agricultural enterprises by 2015 in Kazakhstan, with an average land area of 4,378 ha, which shows the decline in land hold by large-scale farms from 1991. There are 4,578 agricultural enterprises operating on an average land area of 43,112 ha." In one case the agricultural enterprise is characterised by one number (7,687) and latter by another number (4,578). Can an author explain such differences?

In terms of agricultural enterprises, I was informed by my Kazakhs colleagues from Agro-Technical University in Astana that some rich Kazakh people buy the land as large investors in farming. Is it really a new development is Kazakhstan?

The author refers to triple helix. I had the possibility to visit the farm and village Rodina, close to Astana. It was large size farm and due to nature of the persons involved in the activities and links with the university and the government it is a sort of Kazakh triple helix model. Is it true such model does not exist in the region the author studies? Can you explain why (whatever type of the model it is) it exist in the form of Rodina close to Astana and not in region you studied?

I wanted to find out how famous is the text of Carayannis, Barth, and Compbell (2012) The Quintuple Helix innovation model: global warming as a challenge and driver for innovation because the author labels it as famous text (p.21). Web of Science dos not list this text and I was not able to find out the number of quotations. It is a challenge for an author to document her statement about "famous text"

The author uses the terms of government and governance. Can you explain the difference between these two?

Section 1.4 reflects current trends of innovative approaches in developing countries. I am not sure if green revolution is a current trend. What about bio-economy (there will be a global bio-economy summit in April in Berlin where also developing countries will be represented)?

I am not sure if it is appropriate to label trust or honesty as an institution (p. 70). If using the term institution I would rather refer to meta-institution — as something with solves the problems of the institutions. Generally the work with trust in the text is rather vague (e.g. the reference and understanding of Fukuyama with his conceptualization of trust is rather poor)

Table 7 speaks about Institutional environment but the text in the table refers to institutes. I am not sure if institutions and institutes are the same.

Within the section Human capital development conditions an internship programme is mentioned. Can you evaluate its impacts and efficiency (by the why, it would be needed to implement similar exercise /quantitative impact of listed institutions/ for all listed items) of such internship programmes in Kazakhstan?

How was elaborated the figure 15? The note speaks about "own elaborations based on Global Competitiveness Report". What is "own" elaboration of author? Can you describe the method of the elaboration?

Page 97 in the Conclusions speaks about Regional Innovative Systems (RIS) – is it somehow linked to EU Regional Innovative Strategies (RIS)?

The text has some typos like:

Page 85 speaks about table 2 (The findings on borrowing behavior are summarised in Table 2) but table 2 on page 25 presents Endogenous and exogenous rural development – it is confusing.

Reasons of not borrowing in case study 1 is the price (page 85). Obvious question is: the price of what? Of an air?

Page 95: "to adequately observe observe (double word observe).

Despite of all my criticism, I consider the conclusion of work appropriate and good. For instance, the page 86 speaking: "They believe that investments in agriculture cannot deliver sustainable and sufficient revenue that could service repayment rates. Only a small number of respondents think that there is a lack of access to sources of finance that prevents them from borrowing." It is very inspiring for the future work as I have pointed out earlier.

Such highly interesting findings in the dissertation thesis influenced my decision to provide positive feedback for this dissertation thesis "Innovation Models and Their Application for Developing Countries: Case-Studies from Agricultural (Cattle) Development in Rural Kazakhstan" of Ing. Saida Teleuova to be defended and an author should get the Ph.D. degree of Vysoká škola ekonomická. It means Práci doporučuji k obhajobě před příslušnou komisí pro obhajobu disertační práce

In Prague, February 12, 2018

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