**APPENDIX 1**

**TABLE A1** Farm level adaptive governance process enhansing the resilience capacity: robustness, adaptability, and transformability.

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| **Codes for farm level processes** | **Themes of farm level adaptive processes** | **Codes for resilience capacity dimensions** | | |
| **Robustness** | **Adaptability** | **Transformability** |
| **Demographics** | Dynamics of labour in the farming systems: hired labour force, generation renewal, succession |  |  |  |
| Structure of the agricultural labour force: age, qualification, gender, origin |  |  |  |
| Socio-economic issues: income level, long working hours, remote locations |  |  |  |
| **Agricultural practices** | Technological solutions |  |  |  |
| Farming routines |  |  |  |
| **Risk management** | Diversification activities |  |  |  |
| Sharing resources |  |  |  |
| Building human capital  Openness to learn  Apply new ideas and novel approaches  Cooperation |  |  |  |

**TABLE A2** Key indicators and anchor examples for policy measures enhancing the resilience capacity: robustness, adaptability, and transformability

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| **Type of resilience** | **Key indicators** | **Anchor examples of how this indicators may be enabled by policy instruments** |
| **Robustness** | 1. Short-term focus | Payment and programming cycles of one year or less |
| 2. Protecting the status quo | Subsidies for existing production systems |
| 3. Buffer resources | State aid regulations that discourage innovation; financial compensation (emergency schemes) |
| 4. Other modes of risk management | Accessibility of data to individuals; state-funded or subsidized private risk management; procedures to trigger market crisis intervention |
| **Adaptability** | 1. Middle to long term | Programming cycles of one to five years |
| 2. Flexibility | Global directives; dynamic regulatory norms; monitoring focuses on goals instead of means |
| 3. Variety and tailor-made responses | Availability of a wide range of different policy instruments to tackle a problem; room for decentralized decisions; local autonomy |
| 4. Social learning | Communities of practice; broad networks; learning loops embedded in policy |
| **Transformability** | 1. Long term | Long-term backward planning and strategies |
| 2. Dismantling incentives that support the status quo | Abolishment of instruments that support developments which hinder transformations; significant reallocation of resources |
| 3. In-depth learning | Broad consultations; organized and consequential policy dialogues; learning communities |
| 4. Enhancing and accelerating niche innovations | Legal room for experiments; resources for experimenting; right to self-organize; subsidies for niche innovations |

Source: Termeer et al (2018). D 4.1: Assessing How Policies Enable or Constrain the Resilience of Farming Systems in the European Union: The Resilience Assesment Tool (ResAT). Towards SUstainable and REsilient EU FARMing Systems, SURE-Farm Project no.: 727520.

**TABLE A3** Themes and guiding questions used for the farm interview.

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|  | Themes | Guiding questions |
|  | Historical trajectory   * What, why, since when, which challenges (economic, social, environmental, institutional); * Largest changes implemented on the farm, motivation, decision making | Could you tell me about the history of the farm?  Which are the largest changes implemented on the farm (investments, specialisations, diversifications, and change in the production scale)?  Why was this decision made?  What were the motivations behind these changes?  Were there any other options?  Why was this option chosen?  Who took this decision?  What different actions have been taken recently in this respect? Why?  What it has led to if you look at the farm today? |
|  | The current situation on the farm | Can you elaborate on the situation of the farm now?  Which major changes are taking place/are about to take place, can you elaborate on them? |
|  | Organisational structure and farm activities | Who is the main farm operator?  Who takes decisions regarding risk management? Can you give a specific example?  Who takes responsibility for farm production assets?  Who brings in new knowledge and innovative ideas?  Who is the final decision maker regarding financial (investment) choices? Can you give a specific example?  Are you satisfied with this operational structure?  Is there another way in which these roles could be or should be regulated?  What are the current main activities of the business?  Probing questions:  Since when is the farm business in this situation?  What was the motivation behind this?  Which other possibilities have been considered?  Why didn’t one of the other options make it?  Who had something to say in this decision? |
|  | Farm environment | Would you describe the farm you own/manage/work in as a family farm? Why, or why not? What makes it a family farm?  Can you please tell us about the farm location, resources, and capacities?  Can you please tell us about the financial performance? |
|  | Future planning | How do you imagine the future of the farm business?  Do you have dreams/expectations of what the farm should be like in the future?  What are your plans for future investments, specialisations, diversifications, and change in the production scale?  How do you aim to achieve these expectations?  What obstacles do you expect to face during this development? |
|  | Respondents’ role on the farm | Could you explain your role within the farm business?  When did you know you would become a farmer? When did you take over a farm? How easy was this take-over? Why? |
|  | Farming relations and networks:   * Relations on the farm: with family members / employees / main farm operator / farm owner / other farmers / consultant / neighbours * Relationship/cooperation with other farmers, sectors, firms, institutions, industries, consumers, retailers for the farm development * Social learning * Emotions | Who are the three key persons of your network?  Can you describe your relation with them?  Did your relation with X have a significant impact on (the development of) the farm business situation?  What about other stakeholders in the region?  Do they have an impact on your farm in any way? |
|  | Demographic characteristics   * The main actor * Ownership structure * The role of the farm employees (full-time and part time) * Availability of labour (interest for farming and skills) * Off-farm/non-farm employment * Generation change | Ask about the main actor on the farm: age, gender, children, partner, experience, life history, personality, management skills?  Can you please tell us about the land: ownership, leases?  How many family members and how many non-family members work on the farm?  Do you have employees? What form full-time/part-time  Do employees /owners do several different activities on the farm?  Are people involved in activities outside the farm?  Can you please tell us about the generation change on the farm? When will the next generation take over?  Who will take over, and who will not take over? Why? |
|  | Risk management and strategies undertaken for dealing with challenges | What kind of risk management and strategies have been undertaken for dealing with challenges |