

Appendix 1

Table A1.1. Suggestions from the brainstorming session of the determinants of adaptive capacity in terms of actors and for the food system as a whole. Determinants are classified based on their predicted central role in strengthening biological and physical resources, social and human capital, or economic resilience.

| | Biological and physical resources | Social and human capital | Economic resilience |
|------------------------------|---|--|---|
| Primary production (farmers) | Farm size Age of the farmer Amount of land area Soil quality Diversity of crops grown Diversity of crop rotation Diversity of crop cultivars grown Advanced agri-technology Livestock housing at use Quality of production: livestock material, crop yields etc. Water resources available for use Transport and other public infrastructure Self-sufficiency in production inputs Self-sufficiency in energy Own storages for production goods Energy efficiency Efficiency of logistics Exploitation of information and communication technology Closeness to markets Direct sales from farm Diversity in purchasing production inputs Diversity in marketing channels | Level of education and knowledge Expertise in the main production line Knowledge on continuing of a family farm by the next generation Communication with co-farmers Farmer co-operation in using machinery Farmer co-operation in manure distribution and producing feed Farmer co-operation in marketing Dialogue with other food system actors Co-operation with advising Co-operation with research Co-operation with administration Direct international contacts and efforts towards export Longevity and trust in client relations Activity in interest organizations Societal activity Possibility for land trading | Current profitability Surveillance of profitability in the long run Current capital Ratio of debt Earlier investments Availability of investment support Availability of loan capital Willingness and capability for risk taking Pluriactivity Amount of contract-based production Length of contracts Share of forestry Additional incomes by working outside farm Voluntary insurances |
| Production input industry | Size of enterprise Environmental awareness in processes Energy efficiency Efficiency of logistics Diversity of suppliers Diversity of sales channels Closeness to customers Reserve supplies Dependence from import Market research and future foresight | Longevity and trust in client relations Diversity of international contacts Longevity of international contacts Public image and societal responsibility Communication with co-producers Dialogue with other food system actors Co-operation with research Co-operation with | Current profitability Willingness and capability for risk taking |

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|------------------------|---|---|---|
| Processing industry | <ul style="list-style-type: none"> Size of enterprise Production capacity Environmental awareness in processes Energy efficiency Efficiency of logistics Closeness to suppliers of processing material Diversity of suppliers Share of domestic processing material Closeness to markets Dependence from import Efforts towards export Skills in research and product development Market research and future foresight | <ul style="list-style-type: none"> administration Communication to build consumer trust Communication with co-processors Dialogue with other food system actors Co-operation with research Co-operation with administration International co-operation | <ul style="list-style-type: none"> Current profitability Willingness and capability for risk taking |
| Retail | <ul style="list-style-type: none"> Size of enterprise Environmental awareness in processes Amount of suppliers Diversity of suppliers Capacity of suppliers Flexibility in supply channels Direct contacts to producers Centralization of logistics Exploitation of information and communication technology Share of fresh products from sales Share of locally produced food from sales Share of "private label" products from sales Share of imported products from sales Closeness to markets Market research and future foresight | <ul style="list-style-type: none"> Communication to consumers Communication with co-retailers Dialogue with other food system actors Co-operation with research Co-operation with administration International co-operation | <ul style="list-style-type: none"> Current profitability Willingness and capability for risk taking |
| Food system as a whole | <ul style="list-style-type: none"> Infrastructure National emergency supplies Quality of agricultural research Quality of food research Quality of economic and policy research Exploitation of information and communication technology Diversity of the food system Development of local food production Share of domestic production | <ul style="list-style-type: none"> Transparency of the food system Legitimacy and transparency of policy Communication within each actor level of the food system Dialogue among food system actors Dialogue of food system actors and consumers Equability International co-operation | <ul style="list-style-type: none"> Omission of sub-optimization |
