

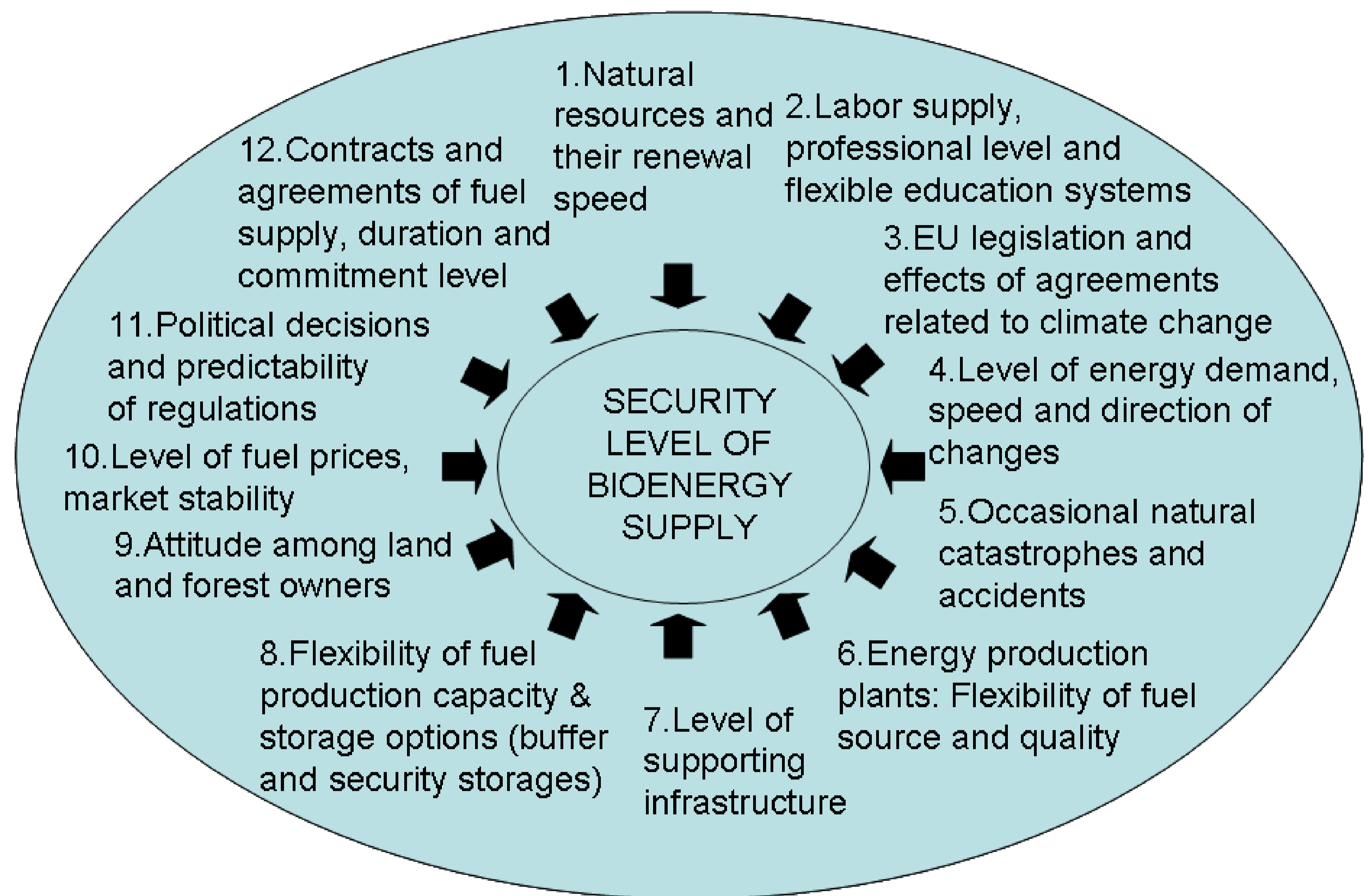
SECURITY OF BIOMASS ENERGY SUPPLY

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Abstract: Security of energy supply is one of the major fundamental factors with regard to the national security and the workability of the basic infrastructure. Thus, it has been studied mostly in order to find solutions or policy implications for the use and storage of imported fuels or the distribution of electricity. However, only a relatively few studies have focused on the security of supply issues in a multidisciplinary and a critical manner. In addition, there is nearly complete absence of new studies relating to the security of biomass energy supply.

Given the statements of the EU, the IPCC and the Finnish government, we are perturbed by the lack of patterns on the security of biomass energy supply; we definitely believe that there is a gap that needs to be filled concerning the studies on the issue. In the light of the recent development in Finland and Sweden we find our topic extremely important.

Our aim is to bring forth new methods and research education, domestic and international journal articles and cooperation between Scandinavian universities on the security of supply research. Our studies will help the entrepreneurs to bring forth innovations and the decision-makers to contemplate the patterns on security of supply.



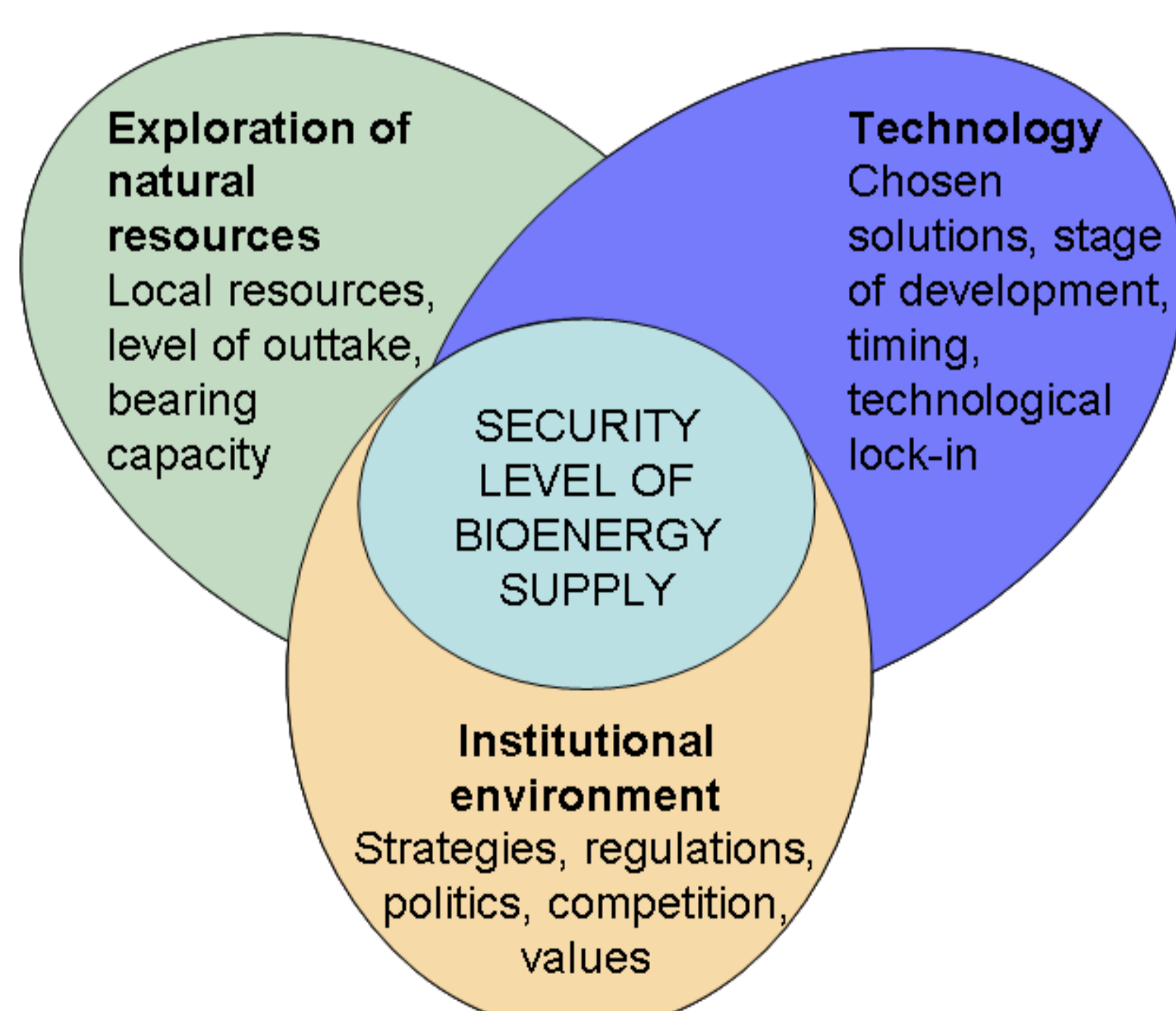
FACTORS AFFECTING SECURITY OF BIOENERGY SUPPLY
Which factors do you see as most important in 2020?

INTRODUCTION

To build up a multidisciplinary research network around questions dealing with the security of biomass energy supply, cooperation between the Department of History and Ethnology and the Department of Bio and Environmental Sciences at the University of Jyväskylä started in the early year of 2009. In our approach we wish to elucidate recent developments in the security of biomass energy supply in Finland and Sweden.

We started our cooperation with defining the most important interacting dimensions and factors related to the security of bioenergy supply. We suggest that studies should be focused on dimensions like the exploration of natural resources, technology level and its development as well as the institutional environments.

INTERACTING DIMENSIONS



RESEARCH TEAMS TECH AND INSTI

Our research will be divided into two groups which will cooperate closely and co-produce both scientific and popular publications and articles on the topic.

- Group TECH is led by D.Sc. (Tech.) Margareta Wihersaari from the Department of Bio and Environmental Sciences and concentrate on the biomass storage issues, power plant comparisons between Finland and Sweden and available biomass resources.
- Group INSTI focus on the institutional environment due to the security of supply, policy and economical trajectories, and the role played by R&D pertaining to the topic. The group INSTI will be led by two economic historians, Ph.D. Jari Ojala and Ph.D. Esa Ruuskanen, from the Department of History and Ethnology.

NEW APPROACHES PERTAINING TO RETROSPECTIVE & PROSPECTIVE DEVELOPMENTS

We believe that a multidisciplinary framework, being in our case a combination of the methods and theoretical backgrounds of bio and environmental, economic, political, and history studies, is crucial in order to understand the energy sector's evolution and dynamics.

We also believe that a multidisciplinary framework is well suited to help us understand the security of energy supply which is characterized by slow changes in political, economical and technological environment as well as big changes in the policies on environment in this time of climate change and global warming. Respectively, we will concentrate on the retrospective and recent developments. Yet, the prospective developments are also discussed.

DISCUSSION INITIATIVES

We suggest further discussion about the strong ties and dependencies as well as about the specific technological innovations with regard to the security of biomass energy supply.

- As for the security of supply, is it a question for market or policy?
- How will the policies on climate dictate the evolution of security of supply?

We also challenge you to define and evaluate factors affecting the security of bioenergy supply and to predict what factors will be the most important for domestic energy security 2020 and 2050. In the picture above you can see twelve factors that we see as important for bioenergy security, but are the most important factors found among these or are there new upcoming issues that we are not yet aware of?

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