

FFRC-PUBLICATIONS 1/2015

RURAL FUTURES

Tuomas Kuhmonen





Writer:

Tuomas Kuhmonen Research Director Ph.D. (Econ. & Bus. Adm.), M.Sc. (Agr. Econ.) tuomas.kuhmonen(a)utu.fi Finland Futures Research Centre FI-20014 University of Turku, Finland

Copyright © 2015 Writer & Finland Futures Research Centre, University of Turku Photographs © Tuomas Kuhmonen

ISBN 978-952-249-302-6 (pdf) ISBN 978-952-249-301-9 (book) ISSN 1797-1284

Finland Futures Research Centre Turku School of Economics FI-20014 University of Turku

Visiting address:

Turku Rehtorinpellonkatu 3, FI-20500 Turku Helsinki Korkeavuorenkatu 25 A 2, FI-00130 Helsinki Tampere Yliopistonkatu 58 D, FI-33100 Tampere

utu.fi/ffrc

 $tutu-info(a)utu.fi,\ firstname.lastname(a)utu.fi$

TABLE OF CONTENTS

Preface	6
1. Global challenges – rural solutions	7
2. How to think about rural futures?	10
3. Rural Finland	17
4. Snapshots of rural futures in Finland	22
5. Concluding remarks	30
References	32

PREFACE

In some instances, rural areas are considered as backward backyards of the glamorous, innovative and dynamic urban centres of attraction. Without doubt, this could be the fate of some rural regions, but not all of them. Just like towns, rural areas face many alternative futures - and different rural regions will face different futures.

The upswing of raw material prices invoked alert people think about natural resources and many related issues: ownership, governance, resource efficiency, sustainability, security of supply and market prospects. Natural resources reside in rural areas. Who will own them in the future? Who will decide upon their exploitation? What will be the ways to valorise them? As rural people are a small minority in developed economies, the natural resources located in their living environment will bring about new potentials and new conflicts. Can we foresee these?

Most importantly, many of the grand challenges of the mankind have essentially rural solutions. Do we identify these challenges? Can we envision ways to resolve them? Do we have institutions and policies, which afford realising these solutions? Ultimately, through which kinds of futures could the challenges, the solutions and the institutions and policies find each other to meet the demands?

This publication briefly discusses rural futures in a global framework, but in a Finnish context. Hopefully this illustration will raise a lot of questions such as the ones mentioned above. Once one starts asking questions, there will be a demand for futures images, prototypes of alternative futures, which could be used to probe sound solutions for the challenges ahead.

Vesanto 25th January 2015

Tuomas Kuhmonen Research Director Finland Futures Research Centre University of Turku

1. GLOBAL CHALLENGES - RURAL SOLUTIONS

Many contemporary policy choices are legitimated by the evident necessity. The considered choice set is very limited. The time perspective is past-based, short or ambiguous. Beyond these current concerns there are grand challenges, which touch upon the majority of the human race in one way or another. Role of the rural world in societies will change along the quest for solutions. New tools and approaches are required, however, and the common feature in all of them is futures thinking. A crystallisation of the grand challenges is a first step in this journey (Figure 1).

Feeding the world asks a lot of resources. More than a third of the land cover of the planet is in agricultural use. Concomitantly, one third of the greenhouse gases accelerating global warming of the climate arise from the food system. About 70% of the abstracted freshwater is used for irrigation mainly in areas of scarce water resources (FAO 2013, 201). Fertilizers, pesticides and other agricultural chemicals are important sources of local pollution. Deforestation and urban sprawl destroy valuable ecosystems. Solving these environmental and water problems are global challenges which are encountered in varying forms and intensities around the globe. Resources of the sustainable economy come from natural resources and the future of natural resources is at stake. Fortunately, solutions exist. They include new technology, new management practises, new institutional arrangements – and they take place in rural areas.

Feeding the world asks for increased food production. By 2050, the globe carries about 30% more people that at present. Global agricultural production should increase by 60% in three decades (FAO 2013, 123). Especially more wheat, vegetable oils, rice, sugar, meat products and dairy products should be produced. Environment affects everything but especially biological production. The resource challenges and production related challenges are strongly interconnected.

Transition from fossil fuels to bio-fuels is ahead, even though estimates of the date of the unavoidable do vary a lot. Replacing the planet's coal plants and oil refineries with sustainable energy systems will take decades and require technological, political and market-based solutions. All raw materials of the new energy systems are located in the rural areas of the planet – except for waste. By 2050, two thirds of the world's population will live in urban areas and have waste as their only important renewable energy source. And more energy is needed: should the average energy use per person to rise up to Poland's current level, the world's energy production would have to double before 2050 (WEC 2007, 6). The rural minority of the planet will have a major challenge in feeding, heating and fuelling the urban majority in their cities.

Besides facing challenges related to resources and production, the human race has created a number of global problems by themselves. Inequality still lives in many forms in religious, institutional and economic shadows. In many countries women have limited access to productive resources and education. In addition women are unable to create careers and are instead tied to household activities only. Democracy has proved to be an effective platform for development by delegating power and obligation to people themselves. A feasible version of democracy is still undercover in many countries and locations. Unplugging the financial markets from the product markets has accentuated polarization. In the worst case, some people own businesses and others do the job and live with the negative externalities. The division between crowded cities and demolished countryside and the division between those owning the natural resources and those working with them are common examples. Does an updated form of the colonial world live among us?

The aforementioned problems related to environment, production and equality enhance volatility of the people and the markets. Human behaviour is hungry for predictability, but global problems will feed us with unpredictability. Problems in the access to food, the availability of food and the affordability of food will be observed globally. Many solutions to the global challenges are looked for in peace and harmony, but fuzzy wars, restless migration and unconventional institutional arrangements will take place, too. Achieving security with varying substance matters and scales will reserve a significant share of the attention and activity space.

Every region will face a specific set of challenges, but some of the challenges knock on every door of the planet in one way or another. Common solutions should be looked for. In this attempt, futures thinking is a useful tool. Alternative futures always exist at the personal, regional, national and global level. Scenarios and futures images are understandable specifications of alternative futures. They could be cultivated, nursed and harvested to feed the people with ideas that facilitate reasoned choices. The future is made up by choices - anyway.

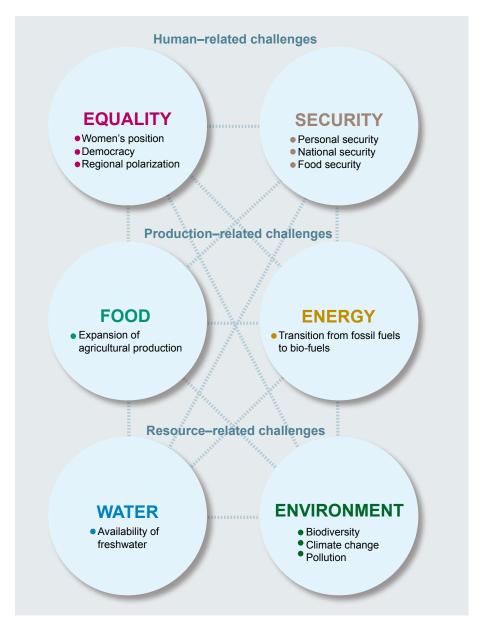


Figure 1. Global challenges – an interrelated network of threats to wellbeing.



2. HOW TO THINK ABOUT RURAL FUTURES?

The reality is always observed, interpreted and explained through a specific looking glass. The choice among appropriate looking glasses depends on the world model or world hypothesis (Pepper 1942, 142-143) of the observer and on the structuring and sense-making of the topic at hand (Rajagopalan & Speitzer 1997, 73). Various methodologies belong to the tribes of paradigms and schools of thought with their ontologies and epistemologies about what the reality is and how such a reality could be besieged with explanations. In this endless effort of the scientific enterprise, various theories are operating systems of the reality and various metatheories are operating systems of the theories (Kuhmonen 2010, 12, 150). But before it is useful to discuss these issues, the specificity of rural world needs some attention.

Place and time

Alternative futures take place in specific places and times. Rural environment is a specific space, extending from the urban outskirts to wilderness. When thinking about rural futures, it is important to observe the specific characteristics of rural places (Figure 2). First, the rural activity space is *geographically* dispersed. The logic of agglomeration lies within city boundaries, but coordination and governance of the rural activities follow the logic of a dispersed economy.

Second, rural activity is bound to specific places, which has many implications. Fields, forests and minerals can not become moved and transplanted to new places where business booms. Due to the law of deminishing returns in the biological processes, "industrialization" of primary industries faces problems. The rural businesses are bound to be rather small and local, and so is the scale of success.

Third, adaptability of the rural economy is limited in some respects. The evolution of biological production is slow (e.g. change of animal stock or crop varieties), the yield of natural recources can not become regulated in the same way as a machine (e.g. natural conditions have an effect) and several sunk costs glue the activity to the existing line of action (e.g. expensive building with little alternative uses). Renewal of the rural economy is relatively slow.

Fourth, rural activity is often severely *policy-dependent*. The use of natural resources, the food supply and the energy supply are sensitive issues which many societies are willing to control and subsidise. Rural bureacracy is an institution. In developed economies, the rural minority is affected by the dreams, fears, needs and powers of the urban majority. Among others, these four features have set specific ploys for the rural futures. What implications do they have on our rural futures under investigation?

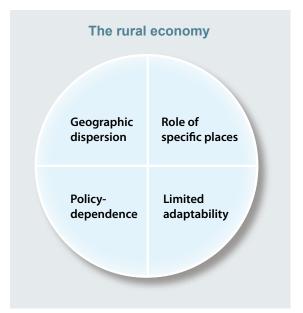


Figure 2. Characteristics of the rural economy.

Rural futures take place in the ether of time, in which things - humans, businesses, markets, policies, places and regions - evolve. Disregarding the exact object of the inquiry, also rural change may be framed with general evolutionary ideas, in which heterogeneity and history matter (Mayr 1976, 20-22). Evolutionary models of change include diverse sources of variation or novelty, selection and retention; these forces produce varying fitness of emerging tenders in their environments (Aldrich

"For evolutionary theory, the important point is that patterns are established and then subjected to real-world feedback that strongly affects what happens next. Because that feedback is often difficult to anticipate, especially at some distance into the future, there is still a sense in which evolution is 'blind': intentionality is expressed situationally, and with imperfect understanding of its implications in the future or in spatially remote locations." (Winter 2014, 631)

& Rueff 2006; Darwin 1859; Martin & Wainwright 2013; Nelson & Winter 1982). When heterogeneous social organisms (humans, firms, cultures, societies) have a "substantial fixed body of practises and structures that condition their behaviour" and environment favours some of these over others, the organisms face differential survival and success (Nightingale 2000, 22).

At the individual level, the path of the past bifurcates to several alternative paths toward the futures (Figure 3), some of which will have a better fit than others, but this is hard to know upon choice (Alchian 1950, 211–213). Over time, various selective forces will direct the structure of the population of individual social organisms to include more members having a better fit with the effective selection environment. This change in the structure of a population is evolution, whereas temporary excellence or success without population effects is just a variation.

Identification of the effective selection environment(s) is the key to success also in economic and social evolution. Various cohesive wholes of social organisms evolve along structural changes in changing environments. Crafting alternative futures serves to enact the becoming selection environments. Conditions of the past, choices of the present and alternatives of the future are embedded in time. The paths of rural activity with their specific ploys are presented at the scenery of time. What implications does a specific temporality place on our quest for rural futures?

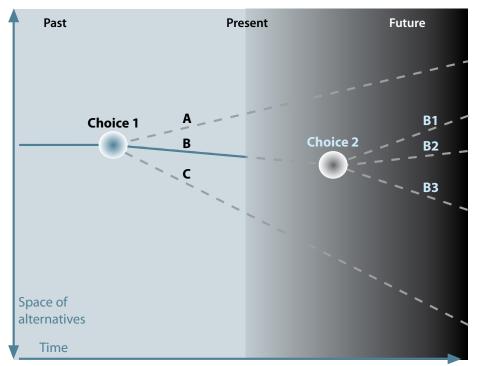


Figure 3. Evolutionary paths.

Reason and outcome

Drivers of the rural change are mostly the same as the drivers of the economic and social change in general. Analysis of 100 foresight reports and futures research reports suggests that the reasons for change could originate for example in personal, economic and governance domains (Kuhmonen & Kuhmonen 2014). By far the most often mentioned reason for change is the environment & sustainability (Figure 4). Other top ten reasons include natural resources & bioeconomy, technology, regulation, local phenomena, inequality, urbanization & centralization, security, capacity for renewal and globalization.

It is worth noting that each of these "barrels of change factors" includes seeds for many kinds of paths, some of which would be beneficial and some detrimental to the rural areas. Another complication is caused by the reason-based effectuation processes, which can be a non-linear and self-inforcing processes: what we currently call local trends or symptons of change (weak signals) can turn into megatrends along a couple of unexpected bifurcations. New modes of governance, belief-based action or remote work can shape our tomorrow more than we think today. Besides this, the observations and judgements of the scholars may be strongly biased, even collectively. The ocean of reasons or drivers of change allows us to pick ingredients for a bewildering array of alternative rural futures. What reasons are effective in the rural futures under our consideration?

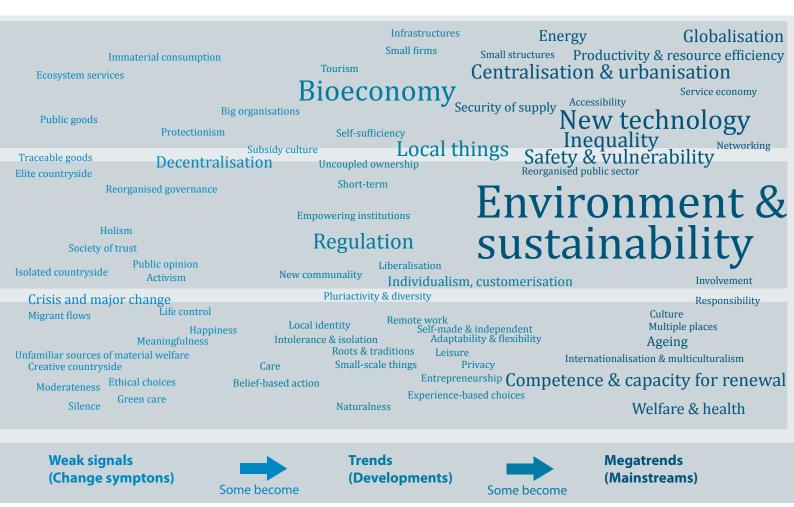


Figure 4. Drivers of rural futures (font size relates to frequency of hits in 100 foresight and futures reports; Kuhmonen & Kuhmonen 2014, 21).

Outcomes resulting from different reasons - or outcomes of variation-selection processes in evolutionary sense - may be described as varying patterns of development paths or typologies of their states. Regarding the pattern of evolution, the change may follow wave, linear, jump, exponential, nested, noise and break patterns (Kamppinen & Malaska 2004, 68). Cyclical evolution of the market economy through crises and growth waves is a well-known phenomenon (e.g., Wilenius & Kurki 2012). Scenarios and backcasting are futures research methods which try to capture some aspects of these alternative trajectories. If the reason tends to result in a specific pattern of outcome, this gives some ideas of the subsequent developments.

Regarding the typology of development states, a feasible level of abstraction is necessary in economic and social domains. In futures studies, futures tables and futures images are common methods in capturing some end-states of developments – these might be preferred, possible and probable (Amara 1981) or their opposites. The attached futures table (Table 1) provides an illustration of possible states of a rural economy in a specific place and time. Alternative futures exhibit varying structures, contents and governances which may be placed on the continua in order to generate coherent futures images or to structure generated futures images. Within the huge space of alternatives, which processes and structures should we telescope in studying the rural universe?

Table 1. Futures table (Kuhmonen & Kuhmonen 2014, 33).

Environment	LocalGlobal
Settlement structure	Dispersed Centralised
Regions and people	EqualityInequality
Structuring	Homogenous Heterogenous
Welfare	MaterialImmaterial
Security of supply	DependenceIndependence
Renewal	StabilityChange
Sustainability	Responsible Selfish
Agency	PrivatePublic
Base of transactions	Trust Distrust
Decision making	AuthoritarianDemocratic

Agency and hierarchy

Where is the agency in the emerging futures? What gives spirit and power, authority and legitimacy for the drivers of change? Individuals, organizations, societies, idiologies - markets, policies? Economic and social novelties are always discovered and invented by individuals. Their implementation asks for organization of resources and activities. Societies afford and constrain individual and organizational activities. Ideologies direct our attention and activities and frame our minds. Markets offer an institution for exchange and policies offer an institution for their regulation. Each of these barrels of agency manifest a different level of activity in an interconnected system, where none of the actors can control the whole system.

Futures emerge from a hierarchical complex system, where tenders serving survival and success will be judged in very local, very global or very mixed environments (Figure 5). A new business idea of a rural entrepreneur may become judged in a very local village market without any global connections, it may be turned down by bureachracy or it may enhance the competitive advantage of the value-chain beginning at the back door of his/her stables. Looking at the list of drivers in Figure 4, the agency setting up their drivers' role on the local, regional, national and international stages of alternative futures may arise from obvious or unobvious sources. In instances where exercising agency results in novelty, the holder of the agency is called an entrepreneur. An economic entrepreneur (Schumpeter 1934, Kirzner 1973, Shane & Venkataraman 2000) breeds renewal of the economy and an institutional entrepreneur (Colomy 1998; Eisenstadt 1980; Leca & Naccache 2006) effectuates renewal of the society.

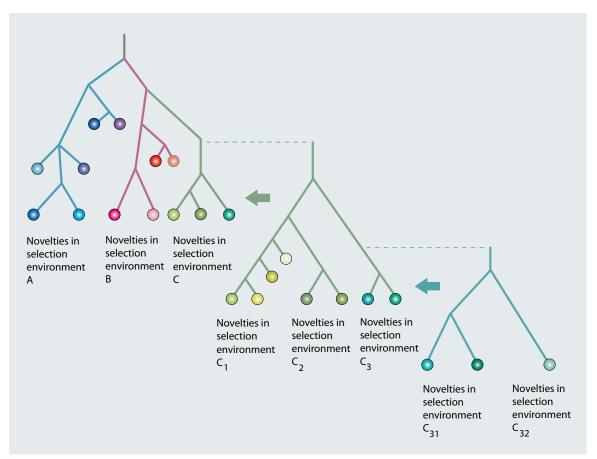


Figure 5. Multi-level system of agencies and structures in the emergence and selection of novelty (Kuhmonen 2014, 39; see also Allen 2005, 452).

INLAND FUTURES RESEARCH CENTRE 🌑 🜑 🜑 🜑 🔘 👓 👓 👓 👓 🔘 🔘 🔘 💮 👚 RURAL FUTURES

This makes the enactment of alternative futures with their drivers, structures and ploys both challenging, exciting and necessary. For ages, philosophers and sociologies have tried to find a place for the human agency between the extremes of morally, cognitively or materially constrained agents under external determinism, and free agents making

"There has always been only one practical guiding principle for the exploration of agency and structure: agency without structure is blind, structure without agency is empty." (Caldwell 2005, 109)

deliberate choices under internal motivation and free will (Coleman 1986; Joas 1996; Lukes 1973; Parsons 1968). Some historically accumulated structures afford and constrain our creativity and action - and these structures are to be changed along excercising creativity and action. There is nothing new in this sociological view of the role of agency and structure (Archer 2000; Giddens 1984). Diverse agencies may talk many languages in various structural settings. According to Scott (2008, 191), they may structure top-down through constitutive activities, diffusion, translation, socialization, imposition, authorization, inducement and imprinting, the bottom-up through selective attention, interpretation and sense-making, identity construction, error, invention, conformity and reproduction of patterns, compromise, avoidance, defiance and manipulation. In reality, many of these mediators of power may work bidirectionally, but the real challenge is to identify where the agency is in each case and what the outcome of exercising the agency is.

By virtue of setting up the playground in terms of specific time and place, by indentifying possible reasons and outcomes in this playground and by defining the alternative ploys through the interplays of agencies and structures, you are now prepared to sketch some rural futures, aren't you?



3. RURAL FINLAND

Finland is a northern, developed and rather large country with extremely low population density. Transformation from agricultural economy to service economy has been rapid (Figure 6). Since the wars in the 1940s, agriculture and forestry have released most of their labour force to other industries along mechanisation and modernisation. Regional main cities have received many new inhabitants, implying large-scale delopulation of

Finland in 2013

Population 5.45 million Land area 303,891 km2 17.9 inhabitants/km2 Population density GDP/capita 37.018 EUR

Employment in

agriculture and forestry 4.4 % Lakes (>0.05 ha) 168,000 496,000 Summer cottages

the most remote rural regions. Rural areas have incubated city dwellers. Many services, which were extended to rural regions still in the 1990s in the era of the Nordic welfare state, are now pulled back to main cities like reverted rivers. In remote areas, the layers of economic activities have become thinner, but the urban-adjacent areas have been able to replace job losses with new inhabitants, commuters (Figure 7). Compared to Sweden, however, the outskirts of Finland still have much more inhabitants thanks to active regional policy exercised from 1950s up to 1980s and rural policy since then.

The deeper division of labout resulted in diversified economy and in better standard of living for all. When people were better off, they tended to use their extra earnings on services. When most services are produced and consumed simultaneously – in the same time and place – growth of services was engaged to regional concentration of population and economic activities. The next stage of the narrative still hides behind the curtain. These developments are very common in industrialised countries, only the pace and the place have been somewhat original in Finland.

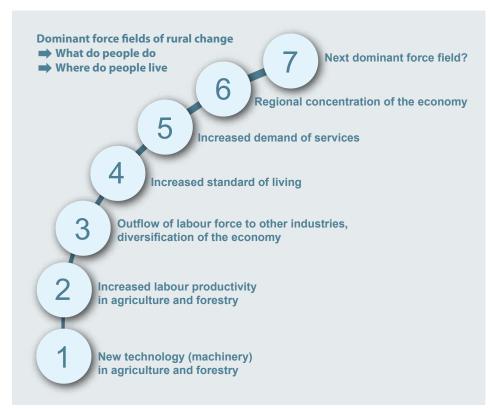


Figure 6. Storyline of rural change in Finland since the wars (Kuhmonen & Niittykangas 2008, 97).

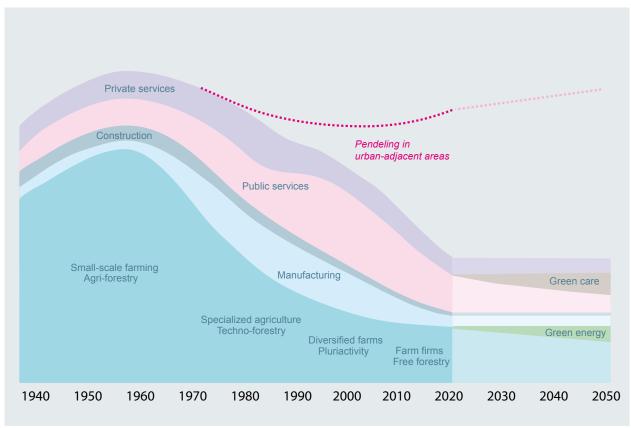


Figure 7. Layers of economic activities in remote rural areas – a schematic model (Oksa 1994, 10, modified).

Agriculture and forestry have been in the core of rural change. After the wars in the 1940s, about 10 % of the population was resettled and a major land reform granted them with small plots of land. Agricultural policy had a strong social orientation. The number of farms increased until the 1960s. After instability, self-sufficiency of food was pursued through strict border protection and significant production subsidies which favoured less-favourable areas. The idea of cohesion was strong. Incomes and welfare on farms was comparable to urban labourers. Mechanisation and competence resulted in surpluses and export refunds in the 1980s, but international pressures started to redirect policy. This accentuated in 1995, when Finland joined the EU and farm-gate process were cut by 40 % on the average. An extensive system of EU subsidies and national regionally differentiated subsidies was adopted and the accompanying bureaucracy pervaded countryside like an epidemic. Finnish agri-food system has adapted to common internal EU market ever since. Interestingly, the story of the Common Agricultural Policy of the EU began with common market and has followed the same stages in reversed order (Figure 8). The seeds of the the next policy harvest are germinating somewhere.

Most of the Finnish farms have some forest. This value-chain has connected backwoods directly with international markets for a century. Subsidies have been minimal so far. The contagious subsidypermission-monitoring disease has started invade forestry, too.

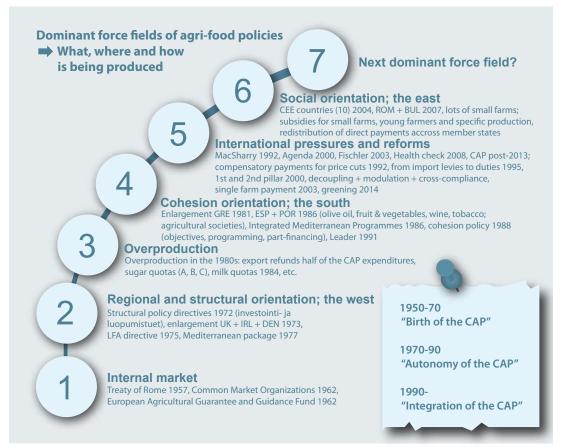


Figure 8. Storyline of the Common Agricultural Policy of the EU.

Along these developments, the role of countryside in the society has changed (Figure 9). For decades, rural areas "produced" and released new labour-force, who lacked rural jobs and moved to cities. Population of the 20 largest cities tripled in 1950–2013 and their share in total population grew from a quarter to a half (derived from Statistics Finland, includes municipal mergers). On the rural verge, about 1.5% of the population inhabit 68% of the

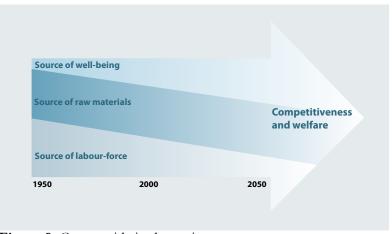


Figure 9. Countryside in the society.

country (Figure 10). This rural well of labour-force will dry out in the future. Until 1980s, the exports of Finland was mostly based on agri-food and forestry products. The dawn of new bioeconomy could valorize natural resources, which are all located in the countryside. Consequently, the role of countryside as a source of raw materials could even expand. Rural areas have provided nature-based welfare since hunting-gathering society. More recently, massive travel to summer cottages at the lakesides has caused traffic jams on weekends. In the future, many lifestyles diversify the role of countryside as a source of welfare (e.g. rural housing with pendeling or remote work, self-sufficiency, green care, nature sports, fishing & hunting). Along these transformations, the rural population has become a monirity, which gives impetus for new opportunities and conflicts.

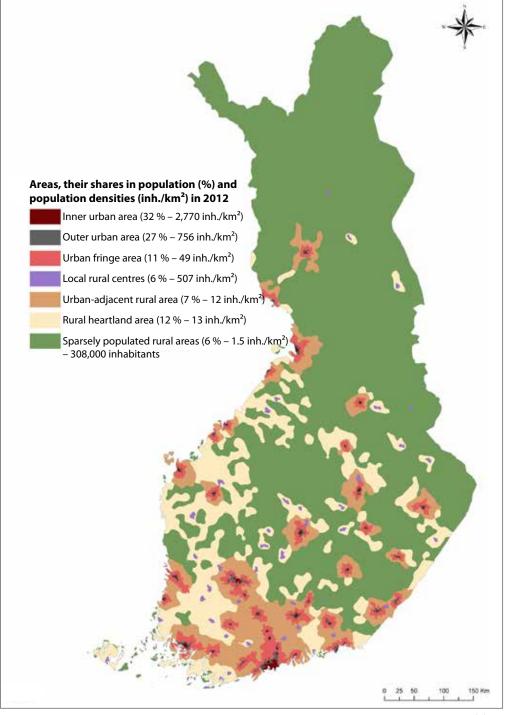


Figure 10. Regional typology of Finland, based on spatial GIS-data (SYKE, TEM).



4. SNAPSHOTS OF RURAL FUTURES IN FINLAND

Many think that there is only one future for the rural areas, which is marginalisation. Obviously, this is not the case. The rural regions are different. The numerous drivers may bring about dozens of different futures: fortunes and dead ends. The future is open, even though one may discuss what is preferable and what is probable. Even the important agri-food policy has more than one future. This diversity of rural futures is discussed and illustrated next.

Big pictures

The following four futures for rural areas are based on futures literature (drivers), futures workshops (ploys) and futures tables (integrity). Depending on how the natural resources are valued and exploited, rural regions will face varying fates (Figure 10). These fates might manifest a dispersed bioeconomy, a colonial countryside, a museum countryside or rural business islets (Kuhmonen & Kuhmonen 2014). Institutions and organisation of rural actors play key roles in the determination of the path toward a particular future. Occasionally, all these futures are already among us in some place, in some scale and in some context. Non of them could apply to all regions, nor are they overarching. Any of the futures could be positioned along the continua of the futures table (Table 1), as evident in the following illustrations. These illustrations - all artificial futures - could, at best, serve as starmaps for those willing and able to navigate toward a desired future or away from unpreferred futures.

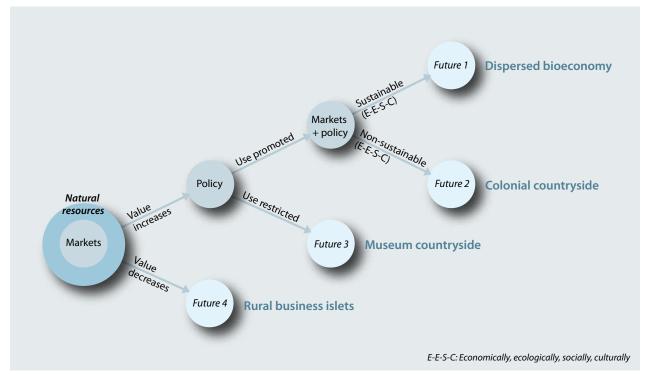
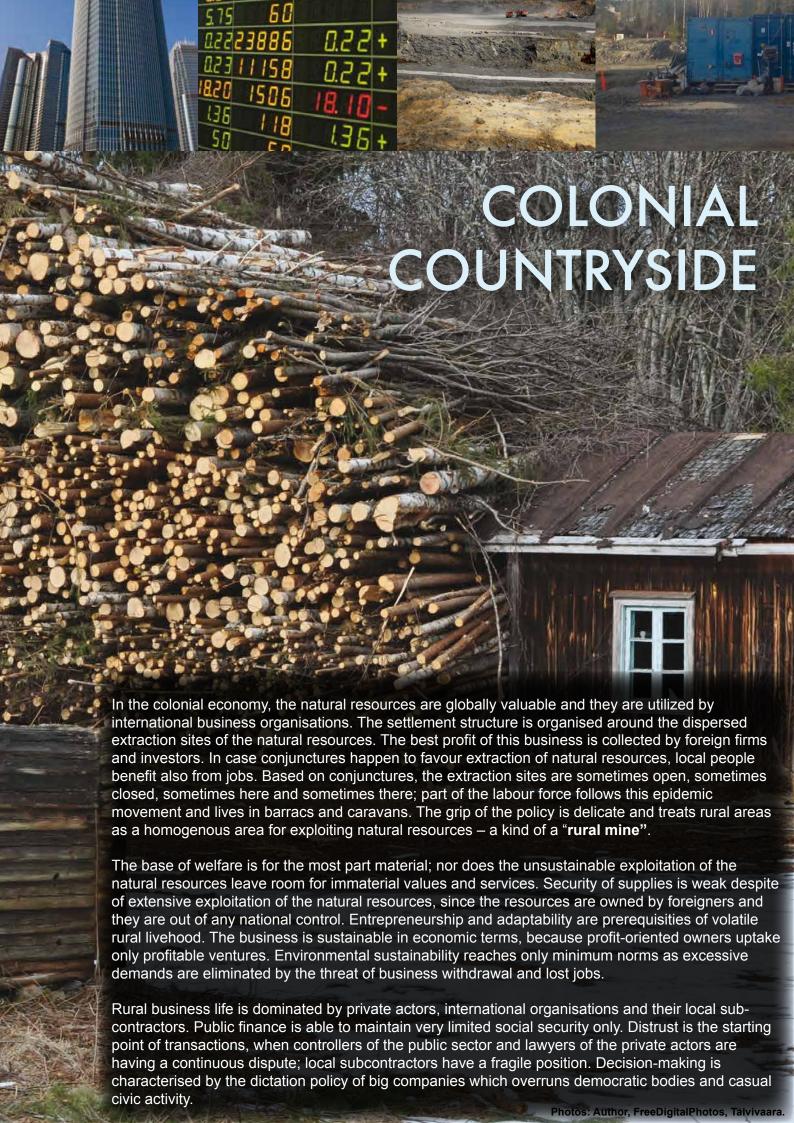
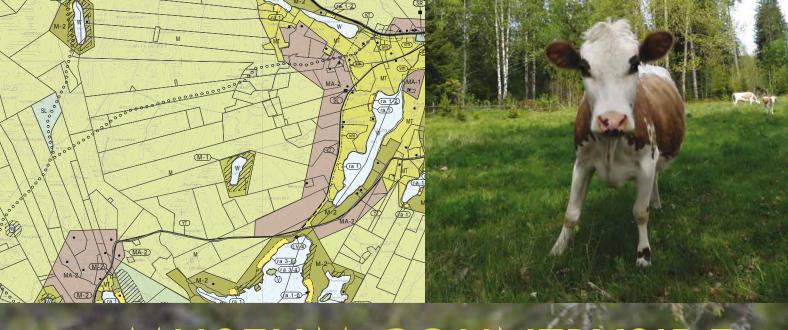


Figure 11. Four futures for rural areas (Kuhmonen & Kuhmonen 2014, 41).







MUSEUM COUNTRYSIDE

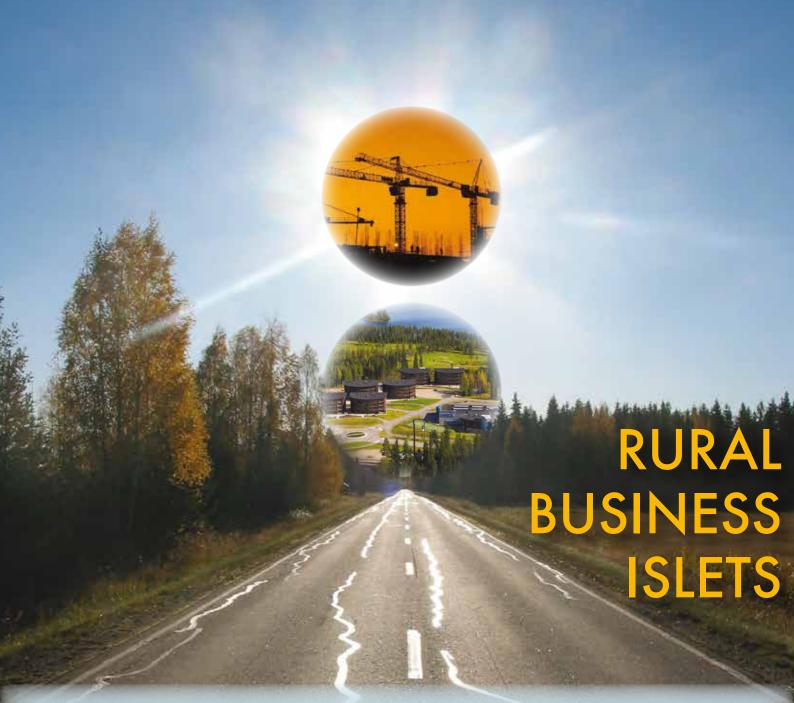
The concerns underlying the museam countryside are global (e.g., sustainability), but policies are national or local (e.g., development of urban regions). The settlement structure is very concentrated, because rural areas lack prerequisities and incentives for business. The few rural residents carry out their eccentric lifestyles or live with public subsidies by providing public goods; together these groups form a powerless small minority as compared to city dwellers. Policy is based on a very homogenous world model, where cities are the areas of progress, innovation and welfare and where rural areas are devoted for resource protection. Rural areas comprise a kind of a huge "traditional biotope". When the society leaves valuable natural resources unexploited, welfare must be based on services and their exports.

The security of supplies is weak and very dependent on imports. Competence in cultivation and exploitation of natural resources has degenerated along the resource protection regime, but competence in design and supply of the servives has improved. Economic and environmental sustainability is achieved, but social and cultural sustainability is at a low level in the rural areas.

Public agency dominates. Rural economy has become more or less part of the public sector, when rural livelihood and activity is fully defined by the public decisions, regulations and subsidies. Extensive regulation, monitoring and sanctioning of the rural activity maintains distrust in the rural-urban transactions. Decision-making is either authoritarian use of power by the urban majority or norm-based coercion by the official authorities. Any use of natural resources requires a permission.



Photos: Author, Kuopion yleiskaava.



Rural bisnes islets are facilitated by global free trade, market liberalism and local prospectors of the "survival society". The economies of scale and agglomeration have paved the way to a settlement structure which is dominated by cities and rural business islets in manufacturing and services; outside these, there are some nature freaks and members of elite who are able to finance their rural living. Regional inequality accentuates, when cities and rural business islets do not radiate wealth extensively. Agglomerations dominate in policy perspectives. Welfare is equally based on material (e.g., manufacturing centres) and immaterial (e.g., adventure centres) origins.

The state of security of supplies depends on the performance of the business islets in market competition. Capacity for change, competence, technology, infrastructures, resource productivity and innovations in agglomerations enhance their renewal, but other regions are stuck to outdated modes of operation. The business islets exhibit economic, environmental, social and cultural sustainability, which do not exist outside their sphere of influence.

Activity in rural areas is purely private, since gauzy and reorganised public sector directs its limited resources to most prominent cities and business islets. Networking, co-operation and mutual trust between the actors prevail within the business islets; outside the islets there is a deep distrust between the public sector and local residents, who defend their territories, which are self-made and self-financed. Decision-making in the cities and in the islets is democratic, but in the views of the other regions it appears to be external and authoritarian.

Photos: Author, FreeDigitalPhotos, Tahko.

Youth dreams

The futures are made up by the current youth, which is why their ideas are informative. In a study by Kuhmonen et al. (2014), a random sample of Finnish youth (18-30 years; n=752) crafted their own dream futures. These were analysed for their contents to identify profiles for different regions to expose what special these offered for the livelihood, accommodation and lifestyles recipes (Figure 11). As evident, different regions have different attractions or potentials. There is no one specific countryside that attracts the youth, but people dreaming of different living environments dream of different livelihood and lifestyle recipes as well. Responding to these dreams would ask differentiating development policies for different regions. These ideas could serve as starmaps for the regions in making their offerings for the futures.

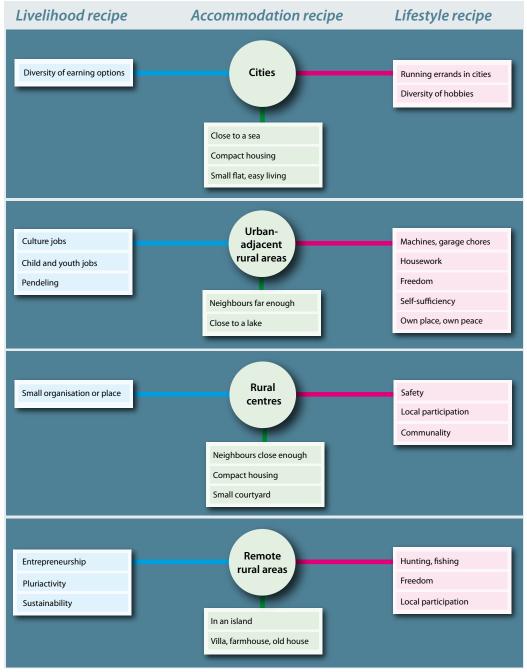


Figure 11. Profiling of areas in the dream futures by the youth (Kuhmonen et al. 2014, 86–87).

Policy regimes

Agri-food policies will remain very important shape shifters for the rural areas also in the future. This domain has been cracterised by continuous reforms (Figure 8), but the underlying dimensions and regimes have been more stable. At a higher level of abstraction, the current policy is a compromise on the dimensions consumer-oriented, regionally oriented, competitiveness-oriented or environmentally oriented policies (Figure 12). It is tempting to think what kinds of futures would exist at the extremes of each dimension and between them. Obviously, there is not only one agri-food policy regime that would be possible for the policy makers or preferable among the stakeholders. These potential regimes could serve as starmaps for policy dialogues in various arenas.

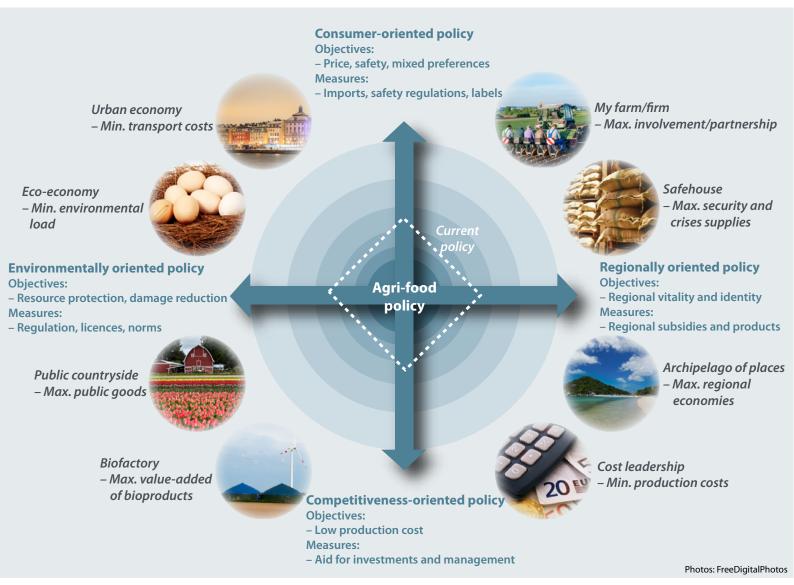


Figure 12. Futures of agri-food policy regimes.



5. CONCLUDING REMARKS

A recap: the rural minority of the planet will have a major challenge in feeding, heating and fuelling the urban majority in their cities in a way that alleviates the environmental problems related to freshwater, pollution, biodiversity and climate change and the human-related problems related to inequality and security. What kinds of rural futures could contribute to resolving these grand challenges? Which kinds of agri-food, energy, environmental and rural development policies could enhance realisation of those particular futures? Ordinary sciences grant us with a corroborated understanding of the past, but for the futures we have to combine science and arts (Figure 13).

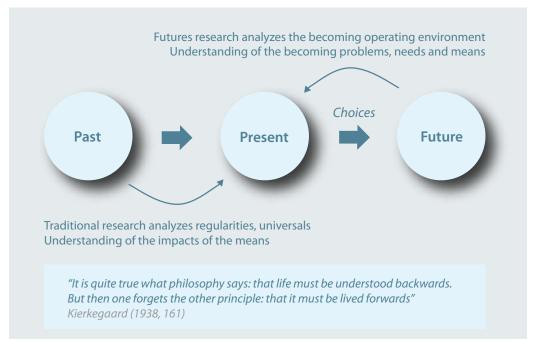


Figure 13. Operating system of science-based policy.

Objective is the most important element of a policy regime, since it dictates policy measures, establishes a benchmark for evaluation of the effectiveness of the policy and organises the stakeholders to work toward a common goal. Policy without a clear objective is blind. It is possible to establish policy objectives by first crafting futures images and then setting the most preferable of the images as the policy objective. This is the very idea of futures studies with several alternatives. The line of logic presented in Figure 14 could ennoble policy design and delivery.

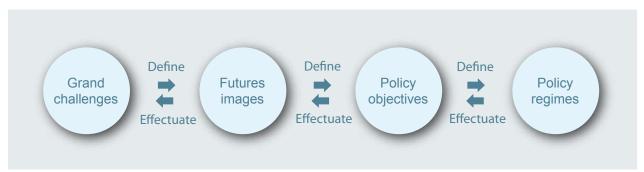


Figure 14. Operating system of policy design.

Many contemporary policy choices are legitimated by the evident necessity. The considered choice set is very limited. The time perspective is past-based, short or ambiguous. For example, the reforms of the Common Agricultural Policy are regularly based on three alternatives presented by the European Commission: the status quo, a radical change and "a compromise" as the only feasible choices. These settings certainly provide flexibility for those having the power and the initiative. However, they probably manifest weaknesses and threats rather than strengths and possibilities. They probably provide answers to small challenges rather than to grand challenges. In order find answers to grand challenges, one has to take steps out-of-the-box. Futures thinking, futures images and other futures studies methods offer assistance in taking these steps. An example: voices of the past consider dispersed settlement structure a source of pollution – voices of the future observe bioenergy (housing) and biofuels (traffic) vanishing these concerns.



REFERENCES

- Alchian, A. A. (1950). Uncertainty, Evolution, and Economic Theory. Journal of Political Economy 58 (3), 211–221.
- Aldrich, H. E. & Ruef, M. (2006). Organizations Evolving. Second Edition. London: Sage.
- Allen, P. M. (2005). Understanding Social and Economic Systems as Evolutionary Complex Systems. In Dopfer, K. (Ed.) The Evolutionary Foundations of Economics. Cambridge: Cambridge University Press, 431–458.
- Amara, R. (1981). The futures field: Searching for definitions and boundaries. Futurist 15 (1), 25–29.
- Archer, M. S. (2000). Being Human: The Problem of Agency. Cambridge: Cambridge University Press.
- Caldwell, R. (2005). Things Fall Apart? Discourses on Agency and Change in Organizations. Human Relations 58 (1), 83–114.
- Coleman, J. S. (1986). Social Theory, Social Research, and a Theory of Action. American Journal of Sociology 91 (6), 1309–1335.
- Colomy, P. (1998). Neofunctionalism and Neoinstitutionalism: Human Agency and Interest in Institutional Change. Sociological Forum 13 (2), 265–300.
- Darwin, C. (1859). On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life. London: John Murray.
- Eisenstadt, S. N. (1980). Cultural Orientations, Institutional Entrepreneurs, and Social Change: Comparative Analysis of Traditional Civilizations. American Journal of Sociology 85 (4), 840-869.
- FAO (2013). FAO Statistical Yearbook 2013: World food and agriculture. Food and Agriculture Organization of the United Nations, Rome.
- Giddens, A. (1984). The Constitution of Society: Outline of the Theory of Structuration. Berkeley, CA.: University of California Press.
- Joas, H. (1996). The Creativity of Action, translated by Jeremy Gaines and Paul Keast. Chicago: University of Chicago Press.
- Kamppinen, M. & Malaska, P. (2004). Mahdolliset maailmat ja niistä tietäminen. Teoksessa Kamppinen, M., Kuusi, O. & Söderlund, S. (toim.) Tulevaisuudentutkimus: Perusteet ja sovellukset. Toinen, korjattu painos. Helsinki: Suomalaisen Kirjallisuuden Seura, 55–115.
- Kierkegaard, S. (1938). The Journals of Søren Kierkegaard (translated by A. Dru). London: Oxford University Press.
- Kirzner, I. M. (1973). Competition and Entrepreneurship. Chigaco, IL: University of Chigaco Press.
- Kuhmonen, T. (2010). Metatheory of Small Firm Performance and Entrepreneurship. Vesanto: Fin-Auguuri Oy.
- Kuhmonen, T. (2014). Maaseudun liiketoiminnan uudistuminen: evolutionäärinen viitekehys. Tutu e-julkaisuja 17/2014. Tulevaisuuden tutkimuskeskus, Turun yliopisto.
- Kuhmonen, T. & Kuhmonen, I. (2014). Maaseudun alueidenkäytön tulevaisuuskuvat. Tutu-julkaisuja 1/2014. Tulevaisuuden tutkimuskeskus, Turun yliopisto.
- Kuhmonen, T., Luoto, L. & Turunen, J. (2014). Nuorten tulevaisuuskuvat maaseudun kehittämistyön lähtökohtana. Tutu-julkaisuja 2/2014. Tulevaisuuden tutkimuskeskus, Turun yliopisto.

- Kuhmonen, T. & Niittykangas, H. (2008). Maaseudun tulevaisuus: ajattelun käsikirja. Helsinki: Maahenki.
- Leca, B. & Naccache, P. (2006). A Critical Realist Approach To Institutional Entrepreneurship. Organization 13 (5), 627–651.
- Lukes, S. (1973). Individualism. Oxford: Basil Blackwell.
- Martin, C. H. & Wainwright, P. C. (2013). Multiple Fitness Peaks on the Adaptive Landscape Drive Adaptive Radiation in the Wild. Science 339, 208–211.
- Mayr, E. (1976). Evolution and the Diversity of Life: Selected Essays. Cambridge, Mass.: Harvard University Press.
- Nelson, R. R. & Winter, S. G. (1982). An Evolutionary Theory of Economic Change. Cambridge, MA: Harvard University Press.
- Nightingale, J. (2000). Universal Darwinism and Social Research: The Case of Economics. In Barnett, W. A., Chiarella, C., Keen, S., Marks, R. & Scnabl, H. (Eds.) Commerce, Complexity, and Evolution: Topics in Economics, Finance, Marketing, and Management. Proceedings of the Twelfth International Symposium in Economic Theory and Econometrics. Cambridge, UK: Cambridge University Press, 21–36.
- Oksa, J. (1994). Maaseudun uusi rakenne. Teoksessa Oksa, J. (toim.) Syrjäisen maaseudun uudet kerrostumat. Karjalan tutkimuslaitoksen julkaisuja 110. Joensuun yliopisto, Joensuu, 9-18.
- Parsons, T. (1968). The Structure of Social Action: A study in Social Theory with Special Reference to a Group of Recent European Writers. With a New Introduction. Vols 1-2. New York: Free Press.
- Pepper, S. C. (1942). World Hypotheses. A Study in Evidence. Berkeley, CA: University of California Press.
- Rajagopalan, N. & Speitzer, G. M. (1997). Toward a Theory of Strategic Change: A Multi-Lens Perspective and Integrative Framework. Academy of Management Review 22 (1), 48–79.
- Schumpeter, J. A. (1934). The Theory of Economic Development. An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle. Cambridge, MA: Harvard University Press.
- Scott, W. R. (2008). Institutions and Organizations: Ideas and Interests. Third Edition. Thousand Oaks, CA: Sage.
- Shane, S. & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. Note. Academy of Management Review 25 (1), 217–226.
- WEC (2007). Deciding the Future: Energy Policy Scenarios to 2050. World Energy Council, London.
- Wilenius, M. & Kurki, S. (2012). Surfing the Sixth Wave: Exploring the Next 40 Years of Global Change. eBook 10/2012. Finland Futures Research Centre, University of Turku, Turku.
- Winter, S. G. (2014). The Future of Evolutionary Economics: Can We Break Out of the Beachhead? Journal of Institutional Economics 10 (4), 613–644.



FINLAND FUTURES RESEARCH CENTRE FFRC-PUBLICATIONS 1/2015 ISBN 978-952-249-302-6 (pdf) ISBN 978-952-249-301-9 (book) ISSN 1797-1284

Is our snow-man melting? Can we feed our world? Do we spoil our natural resources? Where are the safe harbours in crisis?

Many global problems have essentially rural solutions. But rural regions have their own problems and challenges as well: urban sprawl, depopulation, valorisation of natural resources and loss of political power. In industrialised countries, rural people are a minority.

Finland is a very specific country in some respects. Large rural areas, extremely low population density, rapid socio-economic transformation and high economic wellbeing is a rare combination.

The futures of the rural areas are at stake. A dispersed bioeconomy, a colonial countryside, a museum countryside and an archipelago of business islets are all possible rural futures. This book presents snapshots of rural futures with Finnish illustrations.



