The Wicked Problem of Regional Development Policy in Iceland

Anna Guðrún Edvardsdóttir, Research Scientist, Department of Aquaculture and Fish biology, Hólar University, Iceland
Rannveig Ólafsdóttir, Professor, Department of Geography and Tourism Studies, Institute of Life and Environmental Sciences, University of Iceland
Allison Williams, Professor, School of Earth, Environment and Society, McMaster University, Hamilton, Ontario, Canada

Abstract

With increasing globalization, the influence of global drivers on local livelihood and prosperity is becoming more apparent at the local level. Global drivers are for the most part driven by economic incentives and often disregard sustainable rural development. This paper uses a political economy perspective to investigate how global impacts are affecting regional development policy. This is accomplished via content analysis and literary study of regional development policy documents post-2000 in Iceland, recognized as a predominately rural island nation. Contributing to the literature on public administration and policy in Iceland and elsewhere, the paper argues that regional development and sustainability in rural regions is a *wicked problem* and emphasises the importance of a holistic perspective in sustainable regional and rural development. Conclusions suggest that place-specific, nuanced approach needs to be taken to meet the demands of sustainable development. As influenced by the *new regionalism*, places, and the communities within them, differ in environmental, economic, social, and cultural ways. The uniqueness of places underpins the vital importance of inhabitants´ participation in decision making. Moreover, addressing *wicked prob-*

lems at the community level is an easier and a more transparent way to diagnose and manage issues of concern.

Keywords: Wicked problems; political economy; public participation; policy; rural development; sustainable development; global drivers; region; place; community; Iceland.

Introduction

Rural and regional development has been on many governments´ agenda all over the world for decades. To reduce inequalities and bring prosperity, various policies have and continue to be implemented - often in response to critical issues at any given time. Using a political economy approach, which emphasises the intersection between the political and economic (Hooks & Crookston 2013), these policies have prioritized economic growth as their main goal, despite increasing emphasis on sustainable development over the past three decades. Post-development thinking rejects economic growth as the goal of development, claiming that it neither has reduced inequalities nor brought prosperity to those areas defined as underdeveloped or lagging (Omar 2012). This is in line with post-colonial theories that suggest global socio-economic inequality has not changed much in recent decades given the domination of developed urban-leading regions (Kornprobst et.al. 2020). The history of regional development confirms this trajectory. The field emerged in the 1950s with an emphasis on how well regions performed economically. The theoretical frameworks that guided regional development policy paradigms up to the 1970s were Keynesian theories and statism, along with monetarist thought and neo-liberalism (Pike et al. 2006; Stimson & Stough 2008) (Figure 1). However, due to the first oil crisis in 1973 - which showed consequences of resource scarcity, people began to question the assumption of unlimited growth (Du Pisani 2006; Meadows et al. 1972). The following decade (1980s) was characterised by neo-liberal and neo-classical economic thinking, which favours open markets, privatisation, deregulation, and competitiveness (Bachtler & Yuill 2001; Keune 2001). Neo-liberal theories continued to have an impact on regional development policy plans in the 1990s, where economic rationality focused on competitive advantage and neo economic institutional theories highlighting the social, political, and commercial life of institutions (Barca et al. 2021; Obińska-Wajda 2016). Subsequently, the economics of competitive advantage theory was developed by Michael Porter in the early 1990s and was used to 'explain the role and dynamics of the geographical clustering of industries within national economics and their potential contribution to productivity growth and trading competitiveness' (Pike, et al. 2006, 109). At the heart of this theory was the idea of developing clusters.

Since 2000, theories of the so-called *new regionalism* have been advocated, such as *endogenous growth theory* - which emphasises human capital and innovation; *new economic geography* - which focuses on agglomeration and distance; *institutional economics* – which looks at the role of institutions (Barca et al. 2012; Forsberg & Lindgren 2013; Margarian 2013; Stimson & Stough 2008), and *evolutionary economics* - which looks at technological

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

133

and organisational change as key drivers of long-run economic growth (Sabau 2010). Since the turn of the 21st century, a growing focus has thus been on the spatial dynamics of regions and the wellbeing of the people who live and work in these regions. This is stressed both by the Organization of Economic Development (OECD n.d.) and by the European Union (EU 2020), which now emphasizes strengthening regions from inside by working with inhabitants in creating sustainable and resilient regions. However, with increasing globalization, the influence of global drivers on local livelihood and prosperity is snowballing over time and is largely dominated by economic incentives.
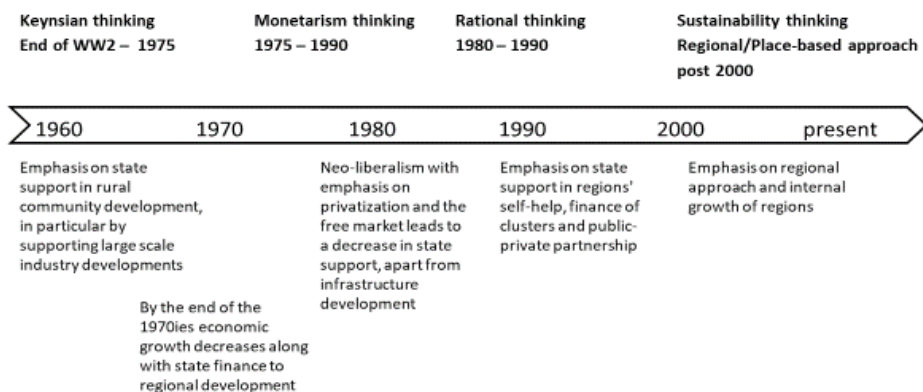

Figure 1. Historical timeline of the major trends in regional development policy

Employing a political economy perspective, this paper uses a content analysis and literary study approach to investigate how global theories have influenced regional development in Iceland at the national level. This is accomplished by examining strategic regional development policy and plans in Iceland since 2000.

The research questions laid out here are: 1) How do global theories/drivers influence regional development practices that are agreed up on at the national government level? 2) Which of the agreed practices progress to the implementation stage? Contributing to the field of public administration and policy, this study suggests the importance of looking at regional policy and planning implementation as *wicked*, meaning that new regional development practices often lead to new problems that call for new solutions.

1. Study area

Iceland is Europe´s most sparsely populated country, with only 3.1 inhabitants per km², and a total population of approximately 387.000 (Statistics Iceland 2023a). Most of the population, or around 64%, live in the capital Reykjavík and the surrounded area located in the Southwestern part of the country (Figure 2) (Statistics Iceland 2023b).
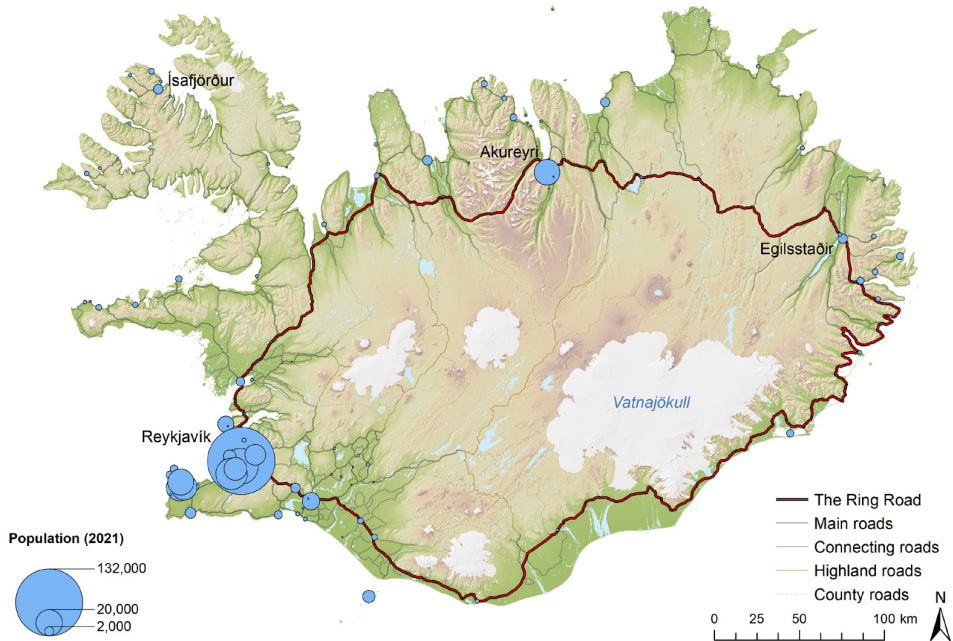
Figure 2. Map of Iceland

The remaining 36% live in small urban centres and sparsely populated farming communities scattered around the country's coastline. Most of the interior highlands is made up of uninhabited wilderness.

Fisheries and agriculture have traditionally been the main industries in Iceland. During the last four decades Iceland has been facing a reduction in these sectors. At the same time Iceland has been moving from a primary production society towards a service- and knowledge-based society. This development has led to out-migration from rural fishing and farming communities to more urbanized communities, principally to the capital area. People prefer to reside in urban communities, most likely due to the diverse opportunities offered there when compared to the countryside (Edvardsdóttir 2016; Ómarsson 2009). With respect to attracting new residents, regional development policy and plans are important tools to enhance the status of rural communities, in order to be competitive with urbanized communities.

2. Conceptual background

2.1 Region, place, and community

The concepts region, place, and community operate at different, albeit connected scales. Region encompasses both place and community, and community is nested within place. Each of these concepts will be defined and discussed in relation to the aims of this paper.

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

135

2.1.1 Region

The concept region comes from the Latin word regio, which means "to govern". In the context of regional development, the term region has been used "to signify the governance of policies to assist the process of economic development" (Cooke & Leydesdorff 2006, 6) of a particular geographical part of the world. Consequently, region has been and still is strongly linked to economy, politics, and policy. Pike (2006, 6) considers region to be a multidimensional concept that should be approached from a multidisciplinary perspective, because "regions remain an arena in which synthesis across disciplines – including economics, geography, planning, politics and sociology – can take place". In this paper the region concept is therefore defined from a holistic point of view.

2.1.2 Place

Place is not just related to an area where people live, but also how people relate and understand the area where they live (Edvardsdóttir 2013; 2016). Several scholars (e.g., Gruenewald 2003; Massey 1991) consider place to be a socially constructed concept, meaning that there are human forces that create a place. Other scholars (e.g., Johnson 2012; Paasi 2002) look at place as movement, suggesting that place is understood daily by people in their own lives. This approach is based on structuration theory, which describes the relations between structures that influence people's lives, and people's ability to respond to these structures daily. Accordingly, places are constantly changing because people make, and remake places every day (Cresswell 2015).

During the 1990s, globalization became an emerging issue that largely influenced the meaning of place as a concept. The enormous technological advancements made in the last decades of the 20th century played a significant part in globalization, defined as a flow of technology, economy, knowledge, people, and values across national borders (Harman 2004; Karlsson & Olsson 2015). Hence, the world started to be seen as a global marketplace, where knowledge, people, and technology moved independently (Fitzsimons 2006). Globalization meant a smaller world for many people, with individuals flowing across borders and connecting through the internet. In a globalized world, places have become an open hybrid of routes rather than roots (Massey 1991). People and/or capital have become more mobile, moving, not only inside their own country, but also between countries. Consequently, the definition of place as a centre of meaning and as a connection to a rooted sense of identity is challenged. Globalization is furthermore gendered and ethnically identified, meaning that mobility is not only an issue of capital, but is also influencing other forms of social relations (Cresswell 2015; Gruenewald 2003; Hargreaves 2004; Jones & Woods 2012; Massey 1991; Paasi 2002).

2.1.3 Community

The community concept is multidimensional and can thus be found in many academic disciplines, such as: geography, sociology, economics, and psychology. In this paper we use Stevenson's (2002, 738) community concept, defined as "social life support systems where people engage with each other, relate to the places and spaces around them and

create meaning together". In this context, the concept of sense of place plays an important role as a description of the relationships people have with a community. In this respect a community is a place, a geographical site, where people live, relate to, and engage with each other. This is supported by Pretty et al. (2003; 2006) and Liepins´ (2000a; 2000b), both which emphasize communities to be a social relationship inside definitive geographical boundaries that are known and acknowledged. In community studies, the concept of community resilience has gradually been increasing in importance. It is generally defined as a "community´s collective capacity to function in, respond to, and potentially influence an environment characterized by continuous change, uncertainty, and crisis" (Faulkner et al. 2018, 1).

2.2 Wicked problems

The concept of wicked problems came to light in the 1970s when people started to lose faith in the "rational-technical approaches to decision making, planning and implementation" (Head & Alford 2013, 2). At this time, people were realizing that policy problems and policy interventions were complex and unexpected. Such problems dealt with social, environmental, economic, and cultural factors that could not be understood or addressed in isolation (Head & Alford 2013; Rittel & Webber 1973).

It has been long accepted that problems can be divided into tame problems and wicked problems (Rittel & Webber 1973). Tame problems are problems that are clear with respect what they are, what causes them, when they are solved, and whether the solution is right or wrong. In cases of tame problems, rational-technical approaches are by many considered to be appropriate (e.g. Jentoft & Chuenpagdee 2009). Wicked problems, on the other hand, are difficult or often impossible to solve because of their complexity and interconnectedness.

Modern societies are seen as pluralistic, which does favour bottom-up solutions, characterized by various social groups coming forward with their differences in desires, values and perceptions, making it difficult to reach clear and agreed solutions (Head & Alford 2013). Major public problems are therefore wicked, which according to Head & Alford (2013), means that they are immune to distinct definitions and agreed solutions. Researchers (e.g., Head & Alford 2013; Jentoft & Chuenpagdee 2009; Rittel & Webber 1973) seem to agree that dealing with wicked problems is a process that does not end with a simple solution, as one must understand that a decision that is taken has consequences that creates another wicked problem. Thus, when dealing with wicked problems, it is critical to look at them holistically to find workable solutions. A holistic understanding of the interrelation between the environmental, economic, social, and cultural aspects of the problem is likewise needed. Bottom-up approaches, where collaboration, coordination, reflection of ideas, and equal evaluation of scientific and local knowledge are key features, as is the recognition of the role that every group or individual involved in the process has (Head & Alford 2013; Jentoft & Chuenpagedee 2009; Ólafsdóttir 2021; Ólafsdóttir et al. 2020). In the context of this paper, when dealing with wicked problems at the local level, the use of public participation is seen as a tool to pro-

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

137

vide both cognitive and political resources. The cognitive resources include information, practical knowledge, and insight that the public possesses – all of which are transferred to policymakers (Bobbio 2019). Numerous researchers (e.g. Keyes 1998; Wandersman & Florin 2000; Zimmerman & Rappaport 1988; Hyde & Chavis 2007; Wollebæk & Selle 2003; Talió et al. 2014) stress that public participation at the community level increases quality of life, enhances social well-being, fosters social empowerment, and reinforces social capital.

Regional development policies can be looked at as wicked problems. The core of such development is a social-ecological system that deals with places where people live and work. How decisions about various issues - such as natural resource exploitation, are made will affect the development of those places as well as the people who live there.

3. Methodology

A literary study, influenced by path dependency´s lock-in, and a content analysis of policy documents were the approaches chosen to investigate how global drivers influence regional development at the national level. The focus was set on examining strategic regional development policy and plans in Iceland post 2000. A literary study involves a deep and systematic analysis of literary texts, considering aspects such as structure, themes, and cultural context. Literary study is a dynamic field that evolves with new critical approaches and the changing landscape of literature, such as political documents (Guerin et al. 2010). This methodology looks at how research within selected fields, in this case regional development theories and policies, have developed over time and across research traditions. For this purpose, discourse analysis is used to identify, analyze, and find patterns in the identified themes. The usefulness of a literary study lies in the ability to provide a historical overview and timeline of regional development theories and policies (Snyder 2019; Guerin et al. 2010).

Path dependency theory additionally stresses that history matters because historical events affect the future development of a system (Appel & Balmann 2022; Goldstein et al. 2022). According to Appel & Balmann (2022) the theory also highlights that systems tend to resist change, which leads them into a lock-in position of a no change situation in policies and practices in an ever-changing world. A content analysis is further used to systematically analyze the content of textual, visual, and audio materials, by identifying and quantifying specific patterns, themes, and characteristics within a set of data, to gain insights into the nature and structure of the content they are analyzing (Howard 2017). In this research a retrospective lens was used, where collected data relate to past phenomenon. In this case, data included the strategic regional development policies and plans since the millennia year 2000. This allows researchers to look back at the phenomenon and study it in its historical integrity (Mohajan 2018) to determine if and how regional policies and practices may have induced a lock-in position.

The data used were an open-source strategic regional development policy plans approved by the Icelandic government at any time. They were obtained from the Icelandic Regional Development Institute website. Data analysis included organization of the

138   STJÓRNMÁL
    — & —
    STJÓRNSÝSLA

The Wicked Problem of
Regional Development
Policy in Iceland

plans chronologically, followed by repeated reviewing for the identification of key issues and themes in the plans´ goals and activities. These issues and themes were then situated within global trends, theories, and drivers, in order to draw a timeline of dominant policies at any one time.

4. Results

4.1 Global drivers

For the past 35 years, there has been consensus among the nations of the world specific to the importance of sustainable development; this has been the case ever since nations agreed to join forces to maintain and develop the prosperity of nations while, at the same time, reducing overexploitation of resources (WCED 1987). However, the road towards sustainability has proven to be largely problematic for most nations. Yet, Vodden et al. (2013) point out that, since 2000, many nations replaced economic development with *new regionalism theory*. *New regionalism theory* draws attention to sustainable development by using a holistic perspective, arguing that regions are constructed through social, environmental, economic, and cultural interactions, often in the same geographical area. Regions are therefore imagined communities that are socially constructed through ideas and institutions (Dang 2023). The theory emphasizes the flow of knowledge, learning and innovation in economic development outcomes in local regions. The sustainable development paradigm and the place-based approach are the backbone of the *new regionalism theory*, along with innovation, learning and knowledge (Daniels et al. 2019; Vodden et al. 2013). In a globalized world, such a holistic approach is fundamental for the resilience of nations´ social-ecological systems. When thinking about how difficult it has been for the nations of the world to adopt sustainable development, one explanation may be that policies and practices are stuck in lock-in positions that prevent these systems to adopt: new ways of thinking, making decisions, using technologies and resources, financing, and co-operation. Daniels et al. (2019) and Vodden et al. (2013) point out that due to the withdrawal of governments' involvement in regional development, *new regionalism* places the region as the core unit in regional development.

Until recently, spatially blind approaches used to dominate regional development policies on a global level; this led to the failure of traditional regional politics to reduce disparities and boost economic growth (Barca et al. 2012; Freshwater & Trapasso 2014; Thissen & Van Oort 2010; Tomaney 2010). Accordingly, a place-based approach to sustainable development became the *new paradigm* in regional policy. Regional development theories have, through the years, been primarily based on endogenous growth theory, characterised by mathematical approaches and empirical tests (Thissen & van Oort 2010). Spatially blind approaches thus believe that intervention is the best way to solve regional development problems. On the contrary, encouraging people's mobility allows people to live where they think they will be better off. Thus, the *new regionalism* represents a new placed-based approach, providing people with opportunities to secure improvements in their lives while guaranteeing equal access to opportunities, irrespec-

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

139

tive of where people live (Daniels et al. 2019). Place-based approaches highlight that interactions between institutions and geography are critical for regional development. Place-based approaches are furthermore designed to identify and build on embedded local knowledge, local values, and a sense of community, but are, at the same time, open to values from outside. Therefore, place-based approaches do not favour *one-size-fits-all* approaches to development that have dominated top-down regional development interventions over the years (Barca et al. 2012; Freshwater et al. 2014). The place-based approaches are in line with the OECD and the EU emphasis that regional development policy must be a sustainable place-based policy, which considers more aspects than just the GDP (Thissen & van Oort 2010; OECD 2006 n.d.; EU 2020.).

This approach has been on the EU agenda since 1991 when the LEADER programme was introduced. The programme emphasised rural areas' endogenous strengths to promote economic growth. It is a place-based approach, which used local experience and knowledge, and assumes that nature, human capital, and culture are fundamental resources for sustainable development (Bosworth et al. 2015; Stockdale 2006). Shortall & Shucksmith (2001) stated that the programme emphasised the development of rural areas´ abilities to support themselves through capacity-building, community-based initiatives, animation, and partnerships. It´s goal was to empower rural inhabitants to take control over their own future and to promote bottom-up development strategies. At the heart of the programme was the importance of economic development as the main goal, although social and civic issues were also addressed.

When the LEADER programme was implemented, policies in general start to become more pro-active and forward looking instead of reacting to existing problems. However, even though strategies have changed, the challenge is still to find new ways of stimulating economic growth while promoting entrepreneurship and innovation, infrastructure, education and training, culture, the environment and the well-being of local communities and their inhabitants.

4.2 National drivers

To map what kind of theories and practices have guided the regional development policies in Iceland since 2000, five strategic regional plans that the Icelandic Parliament (i. Alþingi) has approved were reviewed. In Iceland, it is the role of the Icelandic Regional Development Institute (IRDI) to put forward the strategic regional plans in cooperation with the Ministry of Infrastructure (IRDI n.d1.). The strategic regional plans reviewed are:

1. Strategic regional plan for 2002 – 2005
2. Strategic regional plan for 2006 – 2009
3. Strategic regional plan for 2010 – 2013
4. Strategic regional plan for 2014 – 2017
5. Strategic regional plan for 2018 – 2024

4.2.1 Strategic regional plan for 2002-2005

The strategic regional plan for 2002-2005 emphasized a regional policy like other countries in Western Europe at that time, aiming to "reinforce settlements for sustainable development by strengthening their competitiveness, creating better residential conditions and better roads, enlarging market areas and strengthening cultural, educational and research activities" (IRDI 2005, 4). Accordingly, the main goals were to: reduce any discrimination between rural and urban areas in all sectors; strengthen rural people´s resilience to change; reinforce settlements that had the most potential of attracting new residents; strengthen cultural activities diligently; increase economic diversity, and; equalize occupational conditions so companies could utilize natural resources in a sustainable way (IRDI 2002). To reach the main goals, five objectives were chosen: to build a solid and diverse economy, make stronger municipalities, increase knowledge and skills, promote better transport links, and emphasize sustainable development (IRDI 2002). The suggested activities were: i) to build a power plant and an aluminium smelter in East Iceland; ii) to make a development plan for Akureyri, the largest urban nuclei in Northern Iceland with population of 15.143 on the 1st of January 2000 (IRDI n.d2.), as a growth pole, and iii) to make a development plan for the Westfjords (IRDI 2004).

In this regional development plan, it seems clear that the Icelandic government was pursuing policy based on growth pole ideas. According to Erikson & Westin (2013) growth pole ideology was introduced in a special report in the 1970s undertaken by the European Free Trade Association (EFTA). The report was based on theories of unbalanced growth and national economic convergence founded by economists such as Perroux, Hirschman and Myrdal, as well as the theory of spatial central places developed by the geographer Walter Christaller. By intertwining these theories, EFTA sought to maximize the positive accumulated effect of propulsive industries, meaning that large, lucrative industries would have a positive, trickle-down effect on the surrounding area, and this would best be achieved by locating such industries in places in the higher levels of the urban hierarchy, i.e. places that were already economically and socially strong. At this time EFTA stated that the location of growth poles coincides with places in the higher levels of the urban hierarchy, and that it was important to limit the development plans to a small number of large regional growth centres. Hence, EFTA regional policy suggested that industries should be located at sites and places with minimum size (a population over 30.000 inhabitants) and assumed agglomeration economics (Erikson & Westin 2013).

How this policy was implemented in the 1970s was the responsibility of each EFTA member state. According to Eriksson & Westin (2013), the Nordic countries did not follow the recommendation of the population threshold as they created regional growth centres that had fewer inhabitants. Actions based on the growth pole theory were not executed in the Icelandic strategic plan in the 1970s; instead, every coastal village received government purchased trawlers intended to increase fishing capacity and thereby economic growth at both the local and national level, as well as to increase rural popu-

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

141

lation growth (Ómarsson 2009). Thirty years later, in the regional plan 2002-2005, the Icelandic government proposed to strengthen Akureyri as a growth pole for North and East Iceland. One growth pole in the Northern part of the country would, according to the policy, have positive effects on the quality of life in both North and East Iceland. It was stated that their residential conditions would improve, as people in these regions would get better access to public services, entertainment, cultural activities, education, and health services (IRDI 2002).

This strategic regional plan focusing on Akureyri as a growth pole created a general discussion in other rural regions in Iceland about the growth pole agenda, as other regions were dissatisfied about not being part of the growth pole plan. That led to another kind of regional plan, called *Growth Agreements*, a model adopted from Sweden which was a kind of a contract between the state and the eight rural regions of Iceland. The agreements are project plans addressing innovation and economic development. They are based on an agreement that public and private stakeholders, as well as the state, collaborate to reach certain goals. Public stakeholders, universities, research institutions and private businesses were brought together to form a public–private partnership with a focus on cluster-forming, based on regions´ speciality and strength (Ministry of Industries and Innovation 2015; Ómarsson 2009).

4.2.2 Strategic regional plan 2006 - 2009

The main goals in the strategic regional development plan for 2006–2009 were to improve residential conditions in rural areas and increase the country´s competitiveness. To reach these goals, the government suggested three main objectives: i) to improve education in rural areas; ii) to increase the number of jobs in rural areas, and iii) to subsidize the Iceland Regional Development Institute so it could work on important tasks in the field of regional development. In this regional plan, the growth pole theory increased in importance as the preferred tool for those areas furthest away from the capital region. By identifying and reinforcing the largest settlement cores in the North (Akureyri), in the Westfjords (Ísafjörður) and in the East (Egilsstaðir) as growth poles (Figure 2), the government believed that other settlements, which had been facing out-migration, would also become stronger (IRDI 2006).

This regional plan highlights that Iceland was evolving from a primary production society to a knowledge-based society, and that traditional jobs in the agriculture and fisheries sectors were expected to continue to decline. Accordingly, emphasis was placed on the knowledge industry and higher education - both fundamental to building a knowledge-based society. One tool used was to build knowledge centres in rural areas. (IRDI 2006). It is noteworthy that education is here seen as an economic issue, as population would decrease if education was not promoted in rural areas. Many researchers (Berck et al. 2016; Edvardsdóttir 2013; Leibert 2016) have shown that educational intentions are among the reasons why young people leave their hometowns and are less likely to return as permanent residents.

4.2.3 Strategic regional plan for 2010 - 2013

In a 2009 IRDI report about the regional development policy plan for 2010-2013, the Institute discusses the nation's status and prospect of regional development in the light of the country's economic crisis in 2008. The Institute states that the basic structures of the economy were strong and that might be the nation´s opportunity to recover from the crisis and secure sustainable development. Therefore, a similar emphasis is found in this regional plan as in the previous plan from 2006-2009; that is, "to build on initiative, resources and human resources in rural areas as is done in the growth agreements" (IRDI 2009, 6). The main goal was to create learning regions, where scientific knowledge and tacit knowledge are mixed. By achieving this, it was believed that local knowledge would be created, giving each region a unique status and competitive advantage. A knowledge society via knowledge centres were to be built upon in rural areas. Here, knowledge centres are defined as centres where "cooperation among companies, universities, research institutions and the support system about research, development and innovation for the benefit of social and economic progress is to be found" (IRDI 2009, 31). To coordinate public plans, the IRDI (2009) furthermore stressed the importance of identifying rural areas´ strengths, opportunities, and weaknesses and to formulate the emphasis and goals based on the findings.

While this regional development plan was being developed, the Prime Minister´s Office was working on a development plan for the whole of Iceland, called *Iceland 20/20*. This plan was a response to the effect of the economic crisis which had hit Iceland hard and was an attempt to set a future vision for the country. The plan is first and foremost an economic development policy with a strong emphasis on prosperity, quality of life and sustainability. Even though *Iceland 20/20* was a national policy, targeting Iceland as a whole, the Iceland´s eight regions worked closely with the planners (Iceland 20/20 Steering Committee 2010). Later, based on this work, place-based regional development plans for each of the eight regions were introduced. Those plans emphasised "creating a vision for each region with the areas´ institutions and business´ participation in establishing so called *"one-stop-shop"* and emphasising each region´s strength and characteristics (IDRI 2013, 6). With the policy set in *Iceland 20/20,* sustainability and a place-based approach were introduced into the Icelandic regional development.

4.2.4 Strategic regional plan 2014 - 2017

The key goals of this regional plan emphasize that: all citizens should have equal opportunities wherever they live; sustainable development is to be promoted; communities that have faced a longstanding out-migration, unemployment, and monotonous economy should be supported, and; gender equality should be strengthened. To reach these goals, four main objectives were set out: i) infrastructure, ii) specific actions for fragile communities, which are defined as communities that have been facing depopulation and a homogenous economy for a long period of time, iii) economy, and iv) public service. In this plan, the main emphasis is on equality, especially gender equality, community sustainability and place-based approaches for fragile communities. Its focus is

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

143

thus on community resilience by increasing inhabitants' participation and involvement in community planning (IRDI 2014). It is notable that this is the first time that these priorities received so much focus in Icelandic regional planning, and where place-based approaches focussing on communities and not regions are introduced and are in line with the *Iceland 20/20* policy.

It is noteworthy that the status of women in rural areas is emphasized. This might be because more men than women live in rural areas due to increased out-migration of women. Such a situation will, in the long run, undermine settlements in rural communities. Therefore, it is vital that the economy is aware of women-centric activities, such as in the traditional areas of education, health, and tourism. Edvardsdóttir (2013) points out that rural communities in Iceland are traditionally male-dominated, with values, beliefs, and a labour market that is heavily linked to male-dominated industries, such as the primary production sector, fisheries, aquaculture, agriculture, and the manufacturing industry.

4.2.5 Strategic regional plan 2018 - 2024

In this most recent strategic regional plan, the vision for Iceland is to aim to be in the forefront, with modern infrastructure, progressive services, making of capital goods, equal living standards and robust municipalities that can administer place-based projects and give their inhabitants efficient and good service with sustainable development as a guiding light (IRDI 2018). The main challenges listed in this plan are: to deal with population decrease in specific areas, homogeneous economies, technical change and development, and adaption of various industries. Accordingly, it is important to define necessary mitigation actions as well as adaption to climate change, to ensure good transport and access to services, and to respond to global competition for local people and companies. In this context, specific emphasis is set on fragile communities (IRDI 2018). Three main goals are put forward: i) equal access to services, ii) equal job opportunities, and iii) the promotion of community sustainability. The thread in this strategic plan is equality, sustainability, and place-based approaches that are in line with the previous strategic plan. Here, the execution of the plan is the responsibility of the municipalities in each region as the state is no longer a direct player in the region´s development (IRDI 2018).

In the two last strategic regional plans, it appears that the concept of *sustainable development* is expanded to include fundamental elements, such as the economy, environment, social and cultural aspects; this is reflected in one of the regional goals being to promote sustainability of communities (IRDI 2014; 2018).

5. Discussion

The following discussion sections will critically illuminate the findings in the context of the two research questions posed, namely 1) How do global theories/drivers influence regional development practices that are agreed up on at the national government level? and 2) Which of the agreed practices progress to the implementation stage?

5.1 Influences of global drivers on governmental strategic regional plans

Since the turn of the century (2000), place-based strategic regional plans influenced by the *new regionalism theory* have been the global trend in regional development across the world, accompanied by the decline of state interventions (Daniels et al. 2019; Freshwater et al. 2014; Vodden et al. 2013). Place-based strategic regional plans are characterized by a holistic perspective and emphasise sustainable development by proposing bottom-up approaches, multi-level government engagement and co-operation, as well as programme-based policies (Head & Alford 2013). According to Daniels et al. (2019) their major focus is, however, still on economic growth, which indicates that the system is stuck in a locked-in position.

The results from this study show that the influences of both global theories and drivers on regional development in Iceland reflect the historical trends taking place globally, even if such global trends enter the Icelandic policy later. The result furthermore shows that the economic collapse in 2008 had an impact on the Icelandic government's approach to regional development, as seen in *Iceland 20/20* policy plan. It is therefore possible to divide the last twenty years into two parts; that is, before and after the country´s economic crisis. Before the economic crisis, ideas that influenced the regional plans were: growth pole theory - which emphasise economic endogenous growth, and Keynesian theories - which emphasise state intervention. The purpose of the official projects underpinning the growth pole theory was to reinforce the largest settlement cores in each part of Iceland as growth poles. State intervention projects were large-scale constructions projects, such as building of a hydropower plant to produce electricity for large-scale industries (IRDI 2002; 2005; 2006; Mbl 2007).

The results further reveal that sustainable development as a concept is a red thread running through all the Icelandic strategic regional plans. At the turn of this century, the focus was however entirely on the environmental and economic aspects of sustainability. After the economic crisis in 2008, the social and cultural aspects begin to enter the picture with a major focus on the knowledge society and knowledge centres (IRDI 2002; 2006; 2011; 2014; 2018). Consequently, public-private partnerships became drivers of innovation and economic development. This is consistent with the movement elsewhere in Europe (e.g. Daniels et al. 2019; Vodden et al. 2013). The EU LEADER programme is a good example of a policy that had effect elsewhere, as seen in the *Iceland 20/20* national policy (2010). *Iceland 2020* sets the tone for a bottom-up place-based approach, first seen in the Icelandic strategic regional plans in 2011 when regions were given the opportunity to form their own strategic plan based on their strength and speciality. In 2014, a place-based approach was introduced at the community level with a special emphasis on supporting fragile communities (IRDI 2011; 2013; 2014; 2018). Consequently, both strategic national regional development plans in Iceland support the global trend of *new regionalism* (Forsberg & Lindgren 2013; Margarian 2013; Stimson & Stough 2008), that emphasise place-based approaches, a holistic perspective, and economic, environmental, social, and cultural sustainability. However, it is noteworthy that *new regionalism* does not enter the Icelandic regional policy until much later or after the

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

145

country´s economic crisis in 2008 (IRDI 2002; 2005; 2011). Following the new emphasis in the country's regional policies after 2010, the IRDI began holding consultative meetings in the country´s various regions; this was done in connection with the preparation of the regional plans, and this has been the norm since (IRDI 2014; 2018). Numerous studies (e.g. Bowers 2008; Cresswell 2015; Greenwood 2009; Gruenewald 2003; Somerville 2010; Ólafsdóttir 2021; Ólafsdóttir et al. 2020) stress the value of local knowledge and sense of place within a regional context. They, furthermore, show that mobilizing and strengthening the participation of local people in regional planning is constantly improving, which demonstrates the importance of using more than one approach to boost public participation.

5.2 Wicked problems and community sustainability

Focusing on strengthening communities´ resilience and sustainability has long been a global and national trend. Consequently, it is critical to address place-based strategic regional plans at the community level, keeping in mind that communities within regions differ in many ways (Edvardsdóttir 2013; 2016). The results demonstrate that, following the economic crises in Iceland in 2008, there is an obvious shift in the government's approach – from a top-down approach to a bottom-up approach. This movement is in line with what has happened elsewhere and, with the changing emphasis of the United Nations (e.g., Griggs, et al. 2013; UN 2015). Accordingly, the Icelandic government today places much more emphasis on increasing each community´s sustainability and resilience by focusing on local specialization and strengths, as well as on strengthening public participation in policy- and decision-making. However, although there has been increasing emphasis on broad partnership in the creation of strategic regional plans, where various stakeholders are brought to the table, real progress is yet to be seen. A likely explanation may be found in the *wicked problem* arising in the regional plans, meaning that solutions that are agreed upon ultimately create other problems that must be solved. The results show that the wickedness in regional strategic plans often lies in the implementation of the chosen projects, which is often looked at as the final solution to the problem that is to be solved. It has been pointed out (e.g. Peters 2017) that dealing with wicked problems is a challenging task because of their interconnectedness and the absence of a clear solution. It is therefore vital to acknowledge and face this challenge at the governmental level, by looking at the implementation of the plans as wicked. This is supported by Xiang (2013), who demonstrates that the real challenge in any plan is to find the adaptive mechanism to move forward, stressing the importance of collectively addressing the most pressing and persistent issues.

Population increase, economic growth and job creation have always been the benchmark for success in strategic regional plans. Therefore, large-scale projects that promise economic growth and jobs in the rural regions tend to be favoured nationally and regionally and it seems that the regional development policy is stuck in this locked-in position. To be able to change the perspective, *wicked problems* must be introduced at all levels of decision making. By doing so, we acknowledge that regional development

poses challenges that are impossible to solve "once and for all". Today, the tendency is to start projects aimed to solve problems "once and for all" that have been identified as bad, such as economic downturns and depopulation. Instead of believing that regional development can be solved for good, it must be acknowledged that regional issues and problems are ongoing processes that must be addressed in a holistic way. If not addressed in this manner, rural shrinkage may be the outcome in the long-term, (Tietjen & Jorgensen 2016). The foundation for the long-term sustainability and resilience of communities will always be based on understanding the big picture. In rural areas, like Iceland, the big picture consists of a multitude of local places that represents complex and contested social and cultural situations, all of which are constantly changing due to many multi-scalar factors.

6. Conclusions

This paper has provided a thorough review of five strategic regional policy and plans in Iceland since 2000, while critically discussing the impact of global and national drivers on both policy and plans. However, the last strategic regional development plan for 2022-2035 is not in this review. The results reveal that state intervention, focusing on building large-scale industries and strengthening selected areas as growth poles, were the dominant drivers up to the year 2010. Hence, large-scale state intervention projects were looked upon as the main solution to the problems that were hindering rural regions from thriving economically; such practices were taken to the stage of implementation. However, their wickedness was not taken into consideration when new problems consequently arose. It may therefore be concluded that key elements in solving wicked problems lies in using bottom-up approaches, including public participation, coordination, reflection on various ideas, and valuing scientific and local knowledge equally. Aiming at enhancing communities' well-being and quality of life, the global trend in rural development has, over the last two decades, been focused on transferring power to regions or areas. The Icelandic government took up elements of the new regionalism theory into its policy formation two decades later than the neighbor countries. In Iceland, the economy is nevertheless still in the foreground since the well-being of the community is linked to the regions´ economic growth and competitiveness. Likewise, the benchmark for rural regions´ development still seems to be focused on urbanized areas. This indicates that regional development policy is locked-in a discourse of neo-liberal thought. At the same time, sustainable community development has gradually increased in importance. This is where the wickedness of regional development policy plans lies. Linked to this is the emphasis on equality and a demand for equal access to services and job opportunities. Therefore, the core unit for place-based approaches appears to be the individual community.

To meet the demands of sustainable development and to transfer power to the people, it is critical that each community is given the opportunity to make place-based plans with support from the state and the region from which it belongs. Communities and/or places differ in environmental, economic, social, and cultural ways - all which underpin

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
——— & ———
STJÓRNSÝSLA

147

the vital importance of inhabitants´ participation in decision making. Moreover, addressing *wicked problems* at the community level is an easier and more transparent way to diagnose and manage issues of concern.

Acknowledgements

References

Apple, F., and Balmann, A. (2022). "Predator or prey? Effects on farm growth on neighbouring farms", *Journal of Agricultural Economics* 74, 2014-246. DOI: 10.1111/1477-9552.12503

Bachtler, J., and Yuill, D. (2001). *Policies and strategies for regional development: a shift in paradigm.* University of Strathclyde, European Policies Research Centre.

Barca, E., McCann, P., and Rodríguez-Pose, A. (2012). "The case for regional development intervention: place-based versus place neutral approaches", *Journal of Regional Science,* 52(1), 134-152.

Berck, T., Tano, S., and Westerlund O. (2016). "Regional sorting of human capital: The choice of location among young adults in Sweden", *Regional Studies* 50(5), 756-770.

Bobbio, L. (2019). "Designing effective public participation", *Policy and Society* 38(1), 41-57 https://doi.org/10.1080/14494035.2018.1511193

Bosworth, G., Annibal, I., Carroll, T., Price, L., Sellick, J., and Shepherd, J. (2015). "Empowering local action through neo-endogenous development: the case of LEADER in England", *Sociologia Ruralis,* 1-23.

Bowers, C. A. (2008). "Why a critical pedagogy of place is an oxymoron", *Environmental Education Research,* 14(3), 325-335.

Cooke, P., and Leydesdorff, L. (2006). "Regional development in the knowledge-based economy: The construction of advantage", *Journal of Technology Transfer* 31(1), 5-15.

Cresswell, T. (2015). *Place – a short introduction.* (2nd ed.). London, Blackwell Publishing.

Daniels, J., Douglas, D. J. A., Vodden, K., and Markey, S. (2019). "What is New Regionalism?", in Kelly Vodden, David J. A. Douglas, Sean Markey, Sarah Minnes and Bill Reimer (Ed.): *The theory, practice, and potential of regional development.* The Case of Canada, chapter 3. Routledge publishing.

Dang, Q., A. (2023). "Nordic added value: a floating signifier and a mechanism for Nordic higher education regionalism", *European Journal of Higher Education* 13(2), 142-160. https://doi.org/10.1080/21568235.2022.2106262

Du Pisani, J. A. (2006). "Sustainable development – historical roots of the concept", *Environmental Sciences,* 3(2), 83-96.

Edvardsdóttir, A. G. (2013). "Place and space for women in rural area in Iceland", *Education in the North* 20(Special Issue), 73-89. https://doi.org/10.26203/a37f-eh2

Edvardsdóttir, A. G. (2016). "The interaction of the knowledge society and rural development in Iceland and Scotland", A Ph.D. dissertation from University of Iceland, School of Education. Retrieved in 2021 https://opinvisindi.is/bitstream/handle/20.500.11815/162/Anna%20Gu%c3%b0r%c3%ban%20Edvardsd%c3%b3ttir%20-Lokaeintak.pdf?sequence=1&isAllowed=y

Erikson, M., and Westin, L. (2013). "Regional policy as interaction between national institutions and regional science. The Nordic growth centre policies, 1965-1980", *Scandinavian Journal of History*, 1-21.

EU (European Union). (2020). *Territorial Agenda 2030. A future for all places*. A report from a formal meeting of Ministers responsible for Spatial Planning and Territorial Cohesion. Retrieved in 2022 https://ec.europa.eu/regional_policy/sources/docgener/brochure/territorial_agenda_2030_en.pdf

Faulkner et al. (2018). "Analyzing community resilience as an emergent property of dynamic social-ecological systems", *Ecology and Society* 23(1):24. https://doi.org/10.5751/ES-09784-230124

Fitzsimons, P. (2006). "Third way. Values for education?", *Theory and Research in Education* 4(2), 151-171.

Forsberg, G., and Lindgren, G. (2013). "Regional policy, social networks, and informal structures"*, European Urban and Regional Studies* 0(0), 1 – 15.

Freshwater, D., and Trapasso, R. (2014). "The Disconnect between principles and practice: rural policy review of OECD countries", *Growth and Change* 45(4), 477-498.

Goldstein, J. E., Neimark, B., Garvey, B. and Phelps, B. (2023). *World Development* 161, 1-15. https://doi.org/10.1016/j.worlddev.2022.106116

Greenwood, D. A. (2009). "Place, survivance, and white remembrance: a decolonizing challenge to rural education in mobile modernity", *Journal of Research in Rural Education,* 24(10), 1–6.

Griggs, D., Stafford-Smith, M.; Gaffney, O.; Rockström, J., Öhman, M.C.; Shyamsundar, P., Steffen, W.,Glaser, G., Kanie, N., and Noble, I. (2013). "Sustainable development goals for people and planet", *Nat. Cell Biol.,* 495, 305–307.

Gruenewald, D. A. (2003). "Foundation of place: a multidisciplinary framework for place conscious education", *American Educational Research Journal* 40(3), 619–654.

Guerin, W. L., Labor, E., Morgan, L., and Reesman, J. C. (2016). *A handbook of critical approaches to literature*, (6th ed.). Oxford University Press.

Hargreaves, A. (2004). "Building communities of place: Habitual movement around significant places"*, Journal of Housing and Built Environment 19*(1), 49-65.

Harman, G. (2004). "New directions in international higher education: Australia´s development as an exporter of higher education services", *Higher Educational Policy* 1*7,* 101-120.

Head, B. W. and Alford, J., (2013). "Wicked problems: implications for public policy and management", *Administration & Society* 20(10), 1-29.

Hooks, G. and Crookston, A. (2013). *Political Economy. Oxford Bibliographies*. Political Economy - Sociology - Oxford Bibliographies.

Howard, C. (2017). *Thinking like a political scientist. A practical guide to research methods.* The University of Chicago Press.

Hyde, M., and Chavis, D. (2007). "Sense of Community and Community Building", in *Handbook of Community Movements and Local Organizations* (ed. Ram A. Cnaan and Carl Milofsky). Springer.

Iceland 20/20 Steering Committee (2010). *Iceland 20/20. Results for Iceland 20/20 development plan* (in Icelandic). A report retrieved in January 2014 from http://www.forsaetisraduneyti.is/media/2020/Soknaraaetlun2020Lokaskyrsla.pdf

IRDI (Icelandic Regional Development Institute) (2002). *Proposal for a parliamentary resolution about regional development policy for 2002 – 2005. Nr. 30/127* (in Icelandic). Retrieved in 2021 from https://www.byggdastofnun.is/static/files/Byggdaaaetlun0205/byggdaaetlun0205.pdf

IRDI (Icelandic Regional Development Institute) (2004*). The Minister of Industry and Innovation´s report about the regional development plan for 2002 – 2005 progress* (in Icelandic). Retrieved in 2021 from https://www.byggdastofnun.is/static/files/Byggdaaaetlun0205/skyrsla%20idnadarradherra.pdf

IRDI (Icelandic Regional Development Institute) (2005). *Conditions and prospects in regional development. An enclosure with the parliamentary resolution of regional development plan for 2006–2009* (in Icelandic). A report retrieved in 2021 https://www.byggdastofnun.is/static/files/Byggdaaaetlun0205/skyrsla%20idnadarradherra.pdf

IRDI (Icelandic Regional Development Institute) (2006). *Parliamentary resolution about regional development policy for 2006 – 2009. Nr. 24/132* (in Icelandic). Retrieved in 2021 from https://www.byggdastofnun.is/static/files/Byggdaaetlun0609/byggdaaetlun0609.pdf

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

149

IRDI (Icelandic Regional Development Institute) (2009). *Conditions and prospects in regional development. An enclosure with the parliamentary resolution of regional development plan for 2010–2013* (in Icelandic). A report retrieved in January 2014 from http://www.byggdastofnun.is/static/files/Byggdaaetlun1013/Fylgirit_Byggdaaaetlunar_11.09.pdf

IRDI (Icelandic Regional Development Institute) (2011). *Parliamentary resolution about regional development policy for 2010 – 2013.* Nr. 23/139 (in Icelandic). Retrieved in 2021 from https://www.byggdastofnun.is/static/files/Byggdaaetlun1013/Thingsalyktun_um_stefnumotandi_byggdaaaetlun_2010-2013_1328.pdf

IRDI (Icelandic Regional Development Institute) (2013). *Regional Development in Iceland. Static Analysis 2013. An enclosure with the parliamentary resolution of regional development plan for 2014–2017* (in Icelandic). A report retrieved in January 2014 from http://www.byggdastofnun.is/static/files/Skyrslur/stodugreining-2013-11-11.pdf

IRDI (Icelandic Regional Development Institute) (2014). *Parliamentary resolution on a strategic regional plan for the years 2014-2017* Retrieved in 2021 from https://www.byggdastofnun.is/static/files/Byggdaaaetlun1417/parliamentary-resolution-on-a-strategic-regional-plan-for-the-years-2014-2017.pdf

IRDI (Icelandic Regional Development Institute) (2018). *Parliamentary resolution on strategic regional plan for the period 2018–2024.* Retrieved in 2021 from https://www.stjornarradid.is/lisalib/getfile.aspx?itemid=3b970dc2-f19a-11e8-942f-005056bc4d74

IRDI (Icelandic Regional Development Institute) (n.d1.). *Role* (in Icelandic). Retrieved in 2022 from https://www.byggdastofnun.is/is/um-byggdastofnun

IRDI (Icelandic Regional Development Institute) (n.d2.). *Population by municipalities and communities. January 1ˢᵗ, 2000* (in Icelandic). Retrieved in 2022 from https://www.byggdastofnun.is/is/utgefid-efni/maelabord/ibuafjoldi-1-januar.

Jentoft, S., and Chuenpagdee, R. (2009). "Fisheries and coastal governance as a wicked problem", *Marine Policy* 33, 553-560.

Jones, M., and Woods, M. (2012). "New Localities", *Regional Studies* 47(1), 29-42.

Johnson, J. T. (2012). "Place-based learning and knowing: critical pedagogies grounded in indigeneity", *GeoJournal* 77(6), 829-836.

Karlsdóttir, A., and Ingólfsdóttir, A. (2011). "Gendered outcomes of Socio-economic restructuring: A tale from a rural village in Iceland", *NORA – Nordic Journal of Feminist and Gender Research* 19(3), 163-180.

Karlsson, C., and Olsson, M. (2015). *Functional economic regions, accessibility, and regional development.* Paper no. 415 in CESIS Electronic Working Paper Series. The Royal Institute of technology – Centre for Excellence for Science and Innovation Studies. Retrieved in 2021 from https://static.sys.kth.se/itm/wp/cesis/cesiswp415.pdf

Keune, M. (2001*). Regions, Regional Institutions and Regional Development.* SEED working paper nr. 16. International Labour Office, Geneva. Retrieved in 2021 from https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.524.7559&rep=rep1&type=pdf

Keyes, C. L. M. (1998). "Social Well-Being". *Social Psychology Quarterly* 61(2), 121-140.

Kornprobst, T., Matheis, T., Schlegel, A., Vitello, F., Fritzsche, J., Fuβer, M., Starke, C., Zemeitat, T. and Klüber, D. (2020). *Postcolonialism & Post-Development.* Friedrich Ebert Foundation. Retrieved in 2022 from https://www.convivialthinking.org/wp-content/uploads/2020/08/AKGE_Postcolonialism-Postdevelopment_EN.pdf.

Leibert, T. (2016). "She leaves, he stays? Sex-selective migration in rural East Germany". *Journal of Rural Studies* 43, p. 267-279.

Liepins, R. (2000a). "New energies for an old idea: reworking approaches to 'community' in contemporary rural studies", *Journal of Rural Studies* 16(1), 23-35.

Liepins, R. (2000b). "Exploring rurality through community: discourses, practices and spaces shaping Australian and New Zealand rural communities", *Journal of Rural Studies* 16(3), 325-341.

Margarian, A. (2013). "A constructive critique of the endogenous development approach in the European support of rural areas", *Growth and Change* 44(1), 1-29.

Massey, D. (1991). "A global sense of place", *Marxism Today* 35(6), 24-29.

Meadows, D. H., Meadows, D. L., Randers, J., and Behrens III, W. W. (1972). *The limits of growth.* New York, Universe Books. Retrieved in 2022 from https://donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf

Ministry of Industries and Innovation (2015). *550 million (ISK) put into Iceland 20/20 on regional basis* (in Icelandic). Retrieved in 2021 from http://www.atvinnuvegaraduneyti.is/sjavarutvegs-og-landbuna-darmal/frettir/nr/8514

Mohajan, K., H. (2018). "Qualitative research methodology in social sciences and related subjects", *Journal of Economic Development, Environment and People,* 7(1), 23-48.

Obińska-Wajda, E. (2016). "The new institutional economics-main theories", *Financial Internet Quarterly "e-Finance"* 12(1), 78-85.

Omar, S. (2012). "Rethinking Development from a Postcolonial Perspective", *Journal of Conflictology,* 3(1), 42-49.

OECD (Organization for Economic Co-operation and Development) (n.d.). *Regional Development Policy.* Retrieved in 2022 from https://www.oecd.org/cfe/regionaldevelopment/regionaldevelopment.htm

OECD (Organization for Economic Co-operation and Development (2006). *The New Rural Paradigm. Policies and Governance.* Retrieved in 2022 from https://read.oecd-ilibrary.org/governance/the-new-rural-paradigm_9789264023918-en#page1

Ólafsdóttir, R. (2021). "The role of public participation for determining sustainability indicators for Artic tourism", *Sustainability,* 13*(1)*, 1-20 https://doi.org/10.3390/su13010295

Ólafsdóttir, R., Tuulentie, S., Hovgaard, G., Zinglersen, K. B., Svartá, M., Poulsen, H. H. and Sønder-gaard, M. (2020). "The contradictory role of tourism in the northern peripheries: Overcrowding, over-tourism, and the importance of tourism for rural development", in John McDonagh and Seija Tuulentie (Ed.): *Sharing knowledge for land-use management: decision-making and expertise in Europe´s northern periphery,* chapter 7. Edward Elgar Publishing.

Ómarsson, S. A. (2009). "Icelandic regional policy in the last decades" (in Icelandic), B.A. thesis in the Political studies from University of Iceland. Retrieved in 2021 from http://skemman.is/stream/get/1946/3607/11148/1/pd_fixed.pdf

Paasi. A. (2002). "Place and region: regional worlds and words", *Progress in Human Geography* 26(6), 802-811.

Peters, B. G. (2017). "What is so wicked about wicked problems? A conceptual analysis and a research program". *Policy and Society* 36(3), 385-396. https://doi.org/10.1080/14494035.2017.1361633

Pike. A., Rodrígues-Pose. A., and Tomaney. J. (2006). *Local and regional development.* Routledge.

Pretty, G. H., Chipuer, H. M., and Bramston, P. (2003). "Sense of place amongst adolescents and adults in two rural Australian towns: The discriminating features of place attachment, sense of community and place dependence in relation to place identity", *Journal of Environmental Psychology* 23(3)*, 273-287.*

Pretty, G., Bramston, P., Patrick, J., and Pannach, W. (2006). "The relevance of community sentiments to Australian rural youths´ intention to stay in their home communities", *American Behavioural Scientist* 50(2), 226-240.

Rittel, H. W. J., and Webber, M. M. (1973). "Dilemmas in general theory of planning", *Policy Science* 4, 155-169.

Sabau, G. (2010). "Know, live, and let live: Towards a redefinition of the knowledge-based economy – sustainable development nexus", *Ecological economics* 69, 1193-1201.

Shortall, S., and Shucksmith, M. (2001). "Rural development in practice: issues arising in Scotland and Northern Ireland", *Community Development Journal* 36(2), 122-133.

Snyder, H. (2019). "Literature review as a research methodology: An overview and guidelines", *Journal of Business Research* 104, 333-339. https://doi.org/10.1016/j.jbusres.2019.07.039.

Somerville, M. J. (2010). "A place pedagogy for global contemporaneity", *Educational philosophy and theory,* 42(3), 326-344.

Anna Guðrún Edvardsdóttir
Rannveig Ólafsdóttir
Allison Williams

STJÓRNMÁL
—— & ——
STJÓRNSÝSLA

151

Statistics Iceland (2023a). *Population January 1st*. Retrieved in 2023 from https://www.hagstofa.is/tal-naefni/ibuar/mannfjoldi/yfirlit/

Statistics Iceland (2023b*). Population divided in urban areas versus rural areas*. Retrieved in 2023 from https://px.hagstofa.is/pxis/pxweb/is/Ibuar/Ibuar__mannfjoldi__1_yfirlit__arsfjordungstolur/MAN10001.px/table/tableViewLayout2/

Stevenson, T. (2002). "Communities of tomorrow". *Futures* 34(8), 735-744.

Stimson, R. J., and Stough, R. R. (2008). "Changing approaches to regional economic development: Focusing on endogenous factors", a paper presented in Argentina on the 13th – 14th of March 2008. Regional Science Association International (RSAI) and Banco Central de la Republic Argentina, 1-23. Retrieved in 2021 from http://www.bcra.gov.ar/Pdfs/BCRA/Paper%20STIMSON.pdf

Stockdale, A. (2006). "Migration: Pre-requisite for rural economic regeneration?", *Journal of Rural Studies* 22, 354-366.

Taliò et al. (2014). "Sense of community and Community Participation: A Meta-Analytic Review", *Soc India Res* 117, 1-28. Doi 10.1007/s11205-013-0347-2

Tietjen, A., and Jörgensen, G. (2016). "Translating a wicked problem: A strategic planning approach to rural shrinkage in Denmark", *Landscape and Urban Planning*, 154, 29-43. https://doi.org/10.1016/j.landurbplan.2016.01.009

Tomaney, J. (2010). "Place-based approaches to regional development: global trends and Australian implications"*,* a report for the Australian Business Foundation. Retrieved in 2021 from http://alstonvillewollongbar.com.au/members/Library/Documentation/2014/Place_based_competitiveness_australia.pdf

Thissen, M., and Van Oort, F. (2010). "European place-based development policy and sustainable economic agglomeration", *Tijdschrift voor Economische en Sociale Geografie* 101(4), 473-480.

UN (United Nations) (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*. United Nations A/RES/70/1. Available online: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf (accessed on 28 December 2020).

Vodden, K., Carter, K., and White, K. (2013). "A primer on innovation, learning and knowledge flows", a report from the project *Canadian Regional Development: A Critical Review of Theory, Practice and Potentials*. Retrieved in 2021 from http://cdnregdev.ruralresilience.ca/wp-content/uploads/2013/08/Primer-on-innovation-Aug12.pdf

Wandersman, A., and Florin, P. (2000). "Citizen Participation and Community Organization", in *Handbook of Community Psychology* (ed. Julian Rappaport and Edward Seidman), 247-272.

WCED (World Commission on Environment and Development) (1987). *Our common future*, Oxford University Press: Oxford, UK.

Wollebæk, D., and Selle, P. (2003). "Participation and Social Capital Formation: Norway in a Comparative Perspective", *Scandinavian Political Studies* 26(1), 67-91.

Xiang, W.N. (2013). "Working with wicked problems in socio-ecological systems: awareness, acceptance, and adaptation", *Landscape and Urban Planning*, 110, 1-4, https://doi.org/10.1016/j.landurbplan.2012.11.006

Zimmerman, M. A., and Rappaport, J. (1988). "Citizen participation, perceived control, and psychological empowerment", *American Journal of Community Psychology* 16(5), 725–750. https://doi.org/10.1007/BF00930023.