

Bornholm

Economic and Innovative Capacity: Dealing with Dichotomies



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Förord

I denna rapport redogörs för hur den danska ön Bornholm på olika sätt försöker bygga upp och förbättra sin ekonomiska kapacitet och innovativa förmåga i syfte att stärka sin regionala utveckling. Rapporten ingår som en av totalt fyra regionala fallstudier inom ramen för ett bredare, av ÅSUB lett, nordiskt forskningsprojekt med titeln "Regionalt ansvar eller statlig kraftsamling? Om de nordiska autonomiernas potential och innovativa kapacitet i regional utveckling". De övriga tre fallstudierna gäller Åland, Färöarna och Grönland, varav de två förstnämnda är färdiga och publicerade inom ramen för ÅSUBs rapportserie (Rapport 2007:2 och 2007:8) och den sistnämnda kommer att publiceras innan sommaren 2008.

Grönland, Färöarna och Åland skiljer sig från Bornholm - och alla andra nordiska regioner - genom sin konstitutionella status och sina politiska institutioner. De har nämligen olika grader av inre självstyrelse med en egen lagstiftningsmakt. Med tanke på dagens intensiva diskussion kring hur ansvaret för tillväxt- och innovationspolitiken bäst skall fördelas mellan den centralstatliga och den regionala nivåns aktörer, är det förvånande att erfarenheterna av den form av mer kvalificerat eget politiskt ansvar som Nordens tre autonomier besitter fått så liten uppmärksamhet. Syftet med det ovan nämnda forskningsprojektet är därför att lyfta fram och synliggöra erfarenheterna från Färöarna, Grönland och Åland i den bredare nordiska debatten om förhållandet mellan stat och region i utformningen av morgondagens territoriella utvecklings- och tillväxtpolitik. För att kunna dra slutsatser om relevanta policylärdomar för de mer "normala" nordiska regionerna, genomfördes inom ramen för projektet även föreliggande studie av Bornholm - en ö-region med ungefär motsvarande befolkningsstorlek och ekonomiska skalförutsättningar som de tre autonomierna.

De samlade resultaten av de fyra fallstudierna samt en fördjupad analys av lärdomarna för den regionala tillväxt- och innovationspolitiken i Norden att kommer att publiceras i november/december 2008. Projektet avslutas med en workshop i början av 2009 med särskilt inbjudna forskare och policyansvariga inte bara från fallstudieregionerna, utan även från övriga nordiska regioner samt från ansvarig statlig nivå.

Forskningsprojektet är finansierat av det Nordiska Ministerrådet i Köpenhamn. En viktig partner är även det nordiska regionalforskningsinstitutet Nordregio i Stockholm som ställer kvalificerade forsarresurser till projektets förfogande. Ett stort tack riktas till dessa två inom det nordiska regionalpolitiska samarbetet så centrala aktörer, utan vars insatser detta projekt sannolikt aldrig hade kommit till stånd.

Ansvaret för forskningsarbetet bakom och författandet av denna rapport har åvilat *Lisa Van Well*, forskare vid Nordregio. Van Well har även medverkat i arbetet med den kommande Grönlandsrapporten.

Huvudansvarig projektforskare är ÅSUB-anknutne seniorforskaren och tillika direktören för Åland International Institute of Comparative Island Studies (AICIS) *Agneta Karlsson*.

Det övergripande ansvaret forskningsprojektets framdrift och resultat i sin helhet åvilar undertecknad.

Mariehamn i maj 2008

Bjarne Lindström
Direktör

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Svensk sammanfattning

Den här rapporten är den tredje i en serie fallstudier inom ramen för ett större forskningsprojekt med titeln *"Regionalt ansvar eller statlig kraftsamling? Om de nordiska autonomiernas potential och innovativa kapacitet i regional utveckling"*. Projektet som leds av ÅSUB fokuserar på fyra nordiska ö-regioner, nämligen de tre autonoma territorierna Åland, Grönland och Färöarna samt den danska ön Bornholm. Projektet gör en djupdykning i var och en av dessa fyra öar i syfte att ta reda på deras förmåga att på egen hand mobilisera de resurser som krävs för en långsiktigt hållbar utveckling av den egna ekonomin. Inom ramen för projektet analyseras även öarnas förmåga till att på ett innovativt och pro-aktivt sätt hantera olika typer av socioekonomiska strukturförändringar.

Bornholm är en "normal" nordisk region utan den typ av politisk autonomi som karaktäriserar Färöarna, Grönland och Åland. Då Bornholm ändå har rätt likartade befolkningsmässiga och ekonomiska förutsättningar som de tre autonomierna, kan ön med fördel utnyttjas som en form av "kontrollstudie" inom ramen för projektet. Även om Bornholm inte har någon autonom status i förhållande till moderlandet Danmark, så är ön ett samhälle som på grund av sitt insulära läge arbetsmarknadsmässigt och ekonomiskt är mer avskilt från övriga Danmark än andra danska regioner. Bornholmarna har alltid känt sig som ett särskilt folk med en viss distans till den danska fastlandsbefolkningen, såväl geografiskt som historiskt.

Som en följd av den senaste danska reformen av den regionala nivån, är Bornholm numera administrativt sett en del av den danska huvudstadsregionen (*Region Hovedstaden*). Bornholm har dock fått behålla ett betydande eget ansvar för sin egen utveckling genom att ön fått ansvaret för ett av de sex regionala "*Væksforum*" som inrättades av den danska statsmakten 2007.

Bornholms ekonomiska kapacitet och innovationsförmåga

I denna studie redogörs för hur Bornholm idag försöker bygga upp sin ekonomiska och innovativa kapacitet i syfte att stärka sin regionala utveckling. Genom att utnyttja fallstudiemetoden samt induktiva intervjuer med centralt placerade aktörer, fokuserar studien på hur Bornholm agerar för att "...avvärja externa hot och dra nytta av de nya möjligheter som ges genom en kreativ och effektiv användning av kritiska resurser".

De utifrån kommande hoten mot Bornholm har framför allt handlat om förlorade arbetstillfällen på grund av strukturella kriser inom de traditionella huvudnäringarna fiske och jordbruk. I slutet av 1980-talet genomgick Bornholm en allvarlig tillbakagång

inom dessa två näringar samtidigt som en ekonomisk recession drabbade Danmark som helhet. Bornholm drabbades dock särskilt hårt av den allmänna ekonomiska tillbakagången i Danmark eftersom de nationella ekonomiska problemen tidsmässigt sammanföll med införandet av nya mer restriktiva fiskekvoter och andra strukturproblem inom fiskerisektorn. Kärnkompetensen inom den bornholmska fiskerinäringen urholkades därmed på ett påtagligt sätt - även om olika typer av kringverksamheter (fiskförädling, tillverkning av filémaskiner osv) lever vidare.

Bornholms jordbruk drabbades av en liknande utveckling med en nedgång i näringens relativpriser och minskade sysselsättningsmöjligheter. Eftersom tillgången på produktiv jordbruksmark är begränsad på Bornholm så måste jordbrukarna hitta nya sätt att öka förädlingsvärdet i sina produkter. Såväl fiskeriet som jordbruket måste alltså hitta nya och mer innovativa produktionsmetoder och produkter om de skall ha någon framtid på ön.

Innovationsförmågan undersöks i denna studie både som uppifrån-ner (*top-down*) och nerifrån-upp (*bottom-up*) institutionella åtgärder för att ta vara på det kunnande och de sociala resurser som krävs för en långsiktigt hållbar utveckling av Bornholm. Studien visar att bornholmarna, trots en förhållandevis låg genomsnittlig utbildningsnivå, verkar ha tillräckliga kunskaper för att åstadkomma de innovationer som krävs för en framtida utveckling av ön. Även om det inte alltid är så lätt att få folk att samverka kring gemensamma mål, så har ändå arbetet med att via Bornholms eget "*Væksforum*" etablera viktiga nätverk och öppna nya kommunikationskanaler varit framgångsrikt. Samtidigt står det ändå klart att det fortfarande finns ett behov att stärka de lokala nätverken och mobilisera bornholmarnas kunnande och kreativa potential.

Klyftor som försvårar framväxten av en ny ekonomisk kärnkompetens

Sambanden mellan ekonomisk kärnkompetens och olika former av innovativ kapacitet analyseras också i föreliggande studie. Till skillnad från Färöarna och Åland, vars ekonomier kännetecknas av *en starkt utvecklad kärnkompetens* (fiske respektive sjöfart), är Bornholms "ekonomiska rotsystem" (dvs ekonomiska kärnkompetens) uppsplittrad mellan jordbruk och fiskeriverksamhet. Idag försöker emellertid Bornholm utveckla en ny och mer sammanhållen kärnkompetens genom att kombinera olika delar av det gamla kunnandet inom såväl fiske som jordbruk. Detta manifesteras i olika försök att utveckla turismen och "upplevelsenäringen" som en ny ekonomisk bas för Bornholm.

Det bornholmska samhället karaktäriseras dock av en del rätt så djupa klyftor vilka bör överbryggas innan det blir möjligt att fullt ut kunna mobilisera alla de resurser som behövs för att framgångsrikt utveckla turistnäringen till en ny ekonomisk kärnkompetens. Klyftorna gäller framför allt bornholmarnas identitet som öbor och medborgare i en större Östersjöregion - men även deras beredskap för sociala och ekonomiska förändringar. Medan öns "traditionalister" förespråkar *status quo* och fortsatt användning av traditionella policyinstrument för att främja utvecklingen av sedan gammalt etablerade näringar, välkomnar en växande del av befolkningen innovationer och nya utvecklingsmöjligheter - inte minst inom småskalig turism och markandsföring av lokala mattraditioner ("upplevelseturism").

Även inom turistnäringen finns det en klyfta mellan de som främst vill satsa på ökad mottagningskapacitet, och de som inte bara ser en långsiktigt hållbar mottagningskapacitet som ett kvantitativt mål utan också som en av Bornholms unika (kvalitativa) tillgångar. Det är inte lätt att bygga upp förtroendefulla relationer mellan besöksnäringens olika aktörer så länge som den här typen av djupgående skillnader i synen på de långsiktiga utvecklingsmålen föreligger.

Inom jordbrukssektorn ligger Bornholmarnas fokus på skräddarsydda och strategiskt marknadsförda produkter med högsta möjliga förädlingsvärde. Inom fiskerinäringen finns det växande möjligheter att nyttiggöra bornholmarnas traditioner när det gäller fångst och förädling som en intressant del i en förnyad besöksindustri med växande inslag "upplevelseturism". Trots de stora möjligheterna till aktivt samarbete med klart positiva synergieffekter, verkar dock utvecklingen av de berörda näringarna ske mer eller mindre isolerat från varandra. En tydligare fokusering på ett mer utvecklat samarbete kring de lokala aktörernas innovativa kapacitet skulle på sikt stärka Bornholms ekonomiska kapacitet.

1. Executive Summary

This report on Bornholm forms the third link in larger study on “Regional responsibility or national mobilisation: The Potential of the Nordic Autonomous Regions and Innovative Capacity in Regional Development” (original project name in Swedish: “Regionalt ansvar eller statlig kraftsamling – om de nordiska autonomiernas potential och innovativa kapacitet i regional utveckling”). The project, lead by Statistics and Research Åland (ÅSUB) in Mariehamn focuses on four Nordic Island regions: the three autonomous Nordic regions (Åland, Greenland, the Faroe Islands) and on Bornholm. The project takes an in-depth look at each region to ascertain the economic capacity of the regions to independently mobilise resources for their own regional development and thus manoeuvre their own economies. It equally focuses on the regions’ capacity to proactively deal with changing socio-economic structures or structures, or innovative capacity.

Bornholm, a more “normal” Nordic region in the sense that it not autonomous as are Åland, the Faroe Islands or Greenland, is examined as a control case, as it roughly corresponds with the other regions in terms of population and economic preconditions. While Bornholm is not autonomous from Denmark, it is nevertheless an island community peripheral from the mainland, which confines the labour market to the geographic boundaries of the island. *Bornholmere* have always had an independent streak and have felt somewhat removed from the mainland, both physically and historically. Following the last wave of Danish regional reform in 2007, Bornholm is now part of the Region Hovedstad. The island, however now retains a large degree of regional responsibility when it comes to regional development, as it maintains its own Growth Forum.

Economic and Innovative Capacity on Bornholm

This study details how Bornholm is currently building up its economic and innovative capacity in order to drive its own regional development. Using case study methods and inductive interviews with the significant actors on the island, it focuses on the courses of action taken by Bornholm to “...avert external threats and take advantage of new opportunities through creative and effective utilisation of critical resources”. The external threats on Bornholm have centred on loss of employment opportunities due to structural crises in the traditional core industries of the island: fishing and agriculture. In the late 1980s Bornholm began to experience a serious decline in the traditional fishing and agriculture sectors as the economic recession was making its mark in all of Denmark. Bornholm was particularly hard hit, however, as the recession occurred in

tandem with structural changes in the fishery and fishing industries such as quotas and increased competition. The core competency of the fishing industry was effectively being hollowed out, although the satellite industries around the fishing industry (fish processing, light machinery etc.,) remain strong. Agriculture on Bornholm saw a similar development, with a drop in relative prices and employment opportunities. Since productive land for agricultural land was limited, farmers had to devise ways to increase the added value of their products. Both the fishing and agricultural sectors have to find ways to be innovative.

Innovative capacity is further explored in this study as both the top-down and bottom-up institutional efforts to harness knowledge resources, relational resources and mobilisation capacity for sustainable development on Bornholm. The study shows that Bornholm does seem to have the sufficient knowledge resources for innovation within the local population, despite the low formal educational level. Within the Growth Forum cluster work and in local action group initiatives relational resources are being established in the form of networks and channels of communication, although getting people to work together towards a common goal is difficult. There is still a need for individuals to mobilise the local knowledge and untapped potential of *Bornholmere* and give new life to existing relational networks.

Dealing with Dichotomies to Develop a New Core Competency

The relationship between a core competency and innovative capacity is also examined in this study. Unlike Åland or the Faroe Islands, which have unique strong *unitary core competencies*, Bornholm's traditional root system, or core capacity, has been split between the agriculture and fishing industries. Bornholm, however, appears to be currently searching for ways to create a new core competency out of elements of both the agricultural and fishing industries. This is manifesting itself in efforts to boost the tourism and experience economy as a new base for society.

However Bornholm is characterised by a number of persuasive dichotomies which make mobilisation of resources difficult in the development of tourism as a core competency. The dichotomies concern the identity of Bornholm citizens who have both a provincial, insular identity as well an international identity as part of the Baltic Sea Region, but also the propensity of actors for change. While the "traditionalists" on Bornholm advocate keeping the status quo and using familiar region and national tools for development in traditional industries, there is a growing segment of the population who welcome opportunities for innovation on the island, particularly within the small scale tourism and regional food culture areas. Even within tourism a dichotomy is seen between those islanders who strive to achieve growth and increase the capacity of the tourism infrastructure via exploitation and those who see the sustainable carrying

capacity of the island not only as a goal to be met, but also a one of the unique assets of the Bornholm tourism. It is difficult to build up a relational capacity within in tourism industry when such dichotomies mean impede agreement on a common developmental goal. Only when the dichotomies are addressed can real development occur.

In the agricultural sector, the focus of new opportunities is within the value-added agricultural product sector and in production and packaging of specialty products and foodstuffs. In the fishing sector, there are increased opportunities for utilising the cultural heritage of fishing on Bornholm in the tourism and other experience economies. Yet these processes seem to be occurring independently from one another, despite the degree of overlap and synergies that could be enjoyed through collaboration. With a greater focus on the relational aspects of innovative capacity there are possibilities for boosting the economic capacity on Bornholm.

2. Introduction to Bornholm and background of the study

This report on Bornholm forms one link in larger study on “Regional responsibility or national mobilisation? The Potential of the Nordic Autonomous Regions and Innovative Capacity in Regional Development” (original project name in Swedish: “Regionalt ansvar eller statlig kraftsamling – om de nordiska autonomiernas potential och innovativa kapacitet i regional utveckling”). As such the project, lead by Statistics and Research Åland (ÅSUB) in Mariehamn focuses on four Nordic Island regions: the three autonomous Nordic regions (Åland, Greenland, the Faroe Islands) and on Bornholm. The study takes an in-depth look at each region to ascertain the economic capacity of the regions to independently mobilise resources for its own regional development and thus manoeuvre its own economy. The salient question is: What is the relationship between autonomy and economic capacity? On the other hand, the study puts an equal focus on the concept of innovative capacity, or a region’s capacity to proactively deal with change in socio-economic structures, to eventually build up economic capacity.

The study of Bornholm, a more “normal” Nordic region in the sense that it not autonomous as Åland, the Faroe Islands or Greenland, is examined as a control case, as it roughly corresponds with the other regions in terms of population and economic preconditions. However while Bornholm is not autonomous from Denmark, it nevertheless is an island community in the far periphery from the mainland. *Bornholmere* have always had an independent streak and have felt somewhat removed from the mainland, both physically and historically. Following the last wave of regional reform in Denmark in 2007, Bornholm is now subsumed in the Hovedstad region, but still retains a large degree of regional responsibility when it comes to regional development. Thus we can say that the conditions on Bornholm exhibit a degree of regional “autonomy” or responsibility in light of the regional reforms.

2.1 Approaching Bornholm: Aims and methods

The aim of this case study and project is to show if autonomy - in Bornholm’s case regional responsibility – facilitates the development of economic and innovative capacity. Within this project economic and innovative capacity has been illuminated as the domestic ability to deal with various external (and indeed, internal) crises in a manner that could even turn the negative situation around into a real opportunity. In the report on the Faroe Islands, economic capacity was further elaborated as “*the historically developed capacity of the significant actors within a geographically*

confined area to avert external threats and take advantage of new opportunities through creative and effective utilisation of critical resources.¹”

In the case of Bornholm the most recent challenge has been the economic and fishing crises which started in 1970s and culminated in the late 1980s and early 1990s. This jump-started the process of economic restructuring of society. The effects of the crises were obviously not unique to Bornholm, as it was felt throughout much of the western world. But as a society highly dependent on the fishing industry and as an insular area the effects were quite dramatic.

This study aims to characterise the interplay between regional development and economic systems on the island community of Bornholm. While Bornholm is not autonomous from Denmark, it still retains several elements of regional responsibility. The hypothesis is that this regional room for manoeuvre facilitates the development of innovative capacity, which in turn boosts the economic capacity of the island. Innovative capacity is more specifically conceptualised as knowledge resources, relational resources and mobilisation capacity. But innovation capacity is not born out of thin air. Rather it is nourished by long-standing core competencies in economic history which form the “root system” of socio-economic development. A further goal of this study is to find out what characterises innovative and economic capacity on Bornholm and to examine its relationship with core competencies.

In-situ interviews on Bornholm were one of the methodologies used in the study. This constituted a type of field work where the goal was not only to gather information via interviews, but to explore first hand how the various contexts on Bornholm (social, political, nature, tourism, accessibility) could possibly contribute to understanding the role of economic and innovative capacity on the island. While it is naturally impossible to become an expert on Bornholm in this short period, it nevertheless helped to contribute to a “thicker”² description or understanding of the socio-economic situation on Bornholm.

Interview subjects were determined by asking initial contacts to name the most significant actors with regard to Bornholm’s economic and innovative capacity. These actors were contacted and in turn asked to name other significant actors. This resulted in a fairly cohesive list of important actors on the island. Unfortunately it was not possible

¹ Karlsson, A. (2007) Färöarna: En studie av institutionellt handlingsutrymme, ekonomisk utveckling och ekonomisk-politiskt lärande. Rapport 2007:8. ÅSUB. Åland. Page. 15.

² By “thicker” description we allude to the methodology used in social sciences including anthropology and coined by Clifford Geertz. A description is thick that describes not only behaviour but also context and meaning. Geertz, C. (1973) “Description Toward an Interpretive Theory of Culture” in *The interpretation of Cultures: Selected Essays* (Cambridge, UK: Cambridge University Press, 1988).

to interview each of these, but where interviews were not possible, information was gathered by asking other actors or through documentation.

The study visit to Bornholm lasted 3 days and encompassed a series of seven interviews including some group interviews. The interviews were fairly unstructured and open-ended, where interviewees were encouraged to discuss questions “close to their hearts” as well as the pre-determined list of questions. This resulted in quite long interviews (45 minutes to 2.5 hours) where a wealth of information was attained. Interviewees were extremely cooperative. A list of interviews is included in the References.

Documentation and literature represents the other step in the methodology and this was used to corroborate information received in the interviews and to understand the historical and current situation on Bornholm. Primarily research reports were utilised, but also books, articles and brochures. Statistics, mainly from Statistics Denmark were also used to paint a picture of the socio-economic situation on Bornholm.

This report is structured into four chapters. This second Chapter lays the framework for the analysis of Bornholm’s economic and innovative capacity. The third Chapter provides a portrait of the traditional “root system” or core competency on Bornholm (which in this case is a shared or split competency between the fishing industries and agriculture). The Chapter also provides background information as to the geographical and political conditions on Bornholm in terms of the possibilities and challenges of development. In Chapter 4 the report documents attempts to create greater economic and especially innovative capacity on Bornholm, in both top-down and bottom-up manners and according to the framework of analysis for understanding innovative capacity as knowledge resources, relational resources and mobilisation capacity. It also discusses how tourism could be the germination of a new type of core competency on Bornholm. Chapter 5 brings together all other elements of the study by problematising the possibilities for success within regional development on Bornholm in terms of the plethora of dichotomies that seem to characterise the island. It ponders the question: Must Bornholm accept its dichotomies if it is to achieve regional development and innovative capacity?

2.2 Understanding Economic and Innovative Capacity

The concept of capacity, while widely used and somewhat of a “buzz word” in economic and political analysis today, remains ambiguous and the range of interpretations vary depending on if they are applied to the individual or to an entity or system. It also has different implications if viewed within a short or long term perspective resulting in different prerequisites and strategies. The United Nations

Development Programme provides a broad definition that refers to capacity as the *ability of societies, individuals or organizations to perform functions effectively, efficiently and sustainably*.³ At the EU level, capacity building is one of the cornerstones of EU regional development where capacity is seen as the ability to make effective use of regional competencies. Thus supporting productive capacity of regions, including the capacity to innovate is a goal of EU Regional Policy⁴. However the concept still needs further operationalisation in order to be useful in understanding regional development on Bornholm.

Economic capacity in the Åland's report has been refined as "the capacity of significant actors within a specific region (or spatially defined unit) to avert external threats and take advantage of new external opportunities to benefit the region". The concepts of economic and innovative capacity as the analytical framework of this project are constantly in the processes of ongoing definition and refinement. The Faroe Islands report builds upon the Åland's report and defines economic capacity as "*the historically developed capacity of the significant actors within a geographically confined area to avert external threats and take advantage of new opportunities through creative and effective utilisation of critical resources*".⁵

In accordance with the historical aspect of the analytical construction of "economic capacity" it is possible to discern such capacity over time. Thus if the rate of economic growth (measured in traditional indicators such as GDP/capita) has been fairly stable over time, the economic capacity of that region can be seen as quite high, especially if the region has been plagued by external threats.

Further, the capacity to mobilise critical resources over time and utilise them particularly in times of crises, can be seen as a type of *core competency*. In business studies, the term "core competencies" are seen as the capabilities of a business that are vital to achieving a competitive advantage or a specialised expertise. In EU regional policy "core competencies" are the knowledge skills and know-how that a region can use for development⁶. As used in this report and the Regional Autonomy series, "core competency" has similar but more precise definition. In the Faroe Island report, core competency assimilated with a root system, nourishing and continually bearing up a tree with many branches and limbs of various types. In Åland this project defined a very

³ UNDP (1997) Capacity Development. (Technical Advisory Paper 2), Management Development and Governance Division Bureau for Development Policy. New York, United Nations Development Programme

⁴ European Commission (2008) Working for the regions: EU Regional Policy 2007-2013. January 2008.

⁵ Karlsson, A. (2007) Färöarna: En studie av institutionellt handlingsutrymme, ekonomisk utveckling och ekonomisk-politiskt lärande. Rapport 2007:8. ÅSUB. Åland. Page. 15.

⁶ European Commission (2008) Working for the regions: EU Regional Policy 2007-2013. January 2008.

strong core competency throughout history in the maritime industry. In the Faroe Islands report the core competency was identified within the fisheries industry. One could say, according to this simile, that the heartiness of the branches and limbs, as industrial and business sectors, are only as good as the rootstock supporting the tree. While the business sectors may very well change over time, they bear the same relationship with the core competency or root system. This report will attempt to identify, if possible, the core competency on Bornholm.

The Faroe Island report identified innovative capacity as “... the ability to renewal and reorientation regarding both procurement of resources and resource use within vital sectors of the economy”. Innovative capacity can also be understood as strategic development and adaptation to change⁷. Innovative capacity is likened to the trunk of the tree, an intervening variable; dependent upon the rootstock of *core competency*, yet at the same time supporting the branches and limbs of economic development. As such, innovative capacity is contributing, but not determinate, factor to trends in economic capacity.

2.3 Innovative Capacity

In this report featuring Bornholm, innovative capacity, or the trunk of the tree, will play centre stage. Like economic capacity, innovative capacity concerns how significant actors manage to deal with regional challenges in a manner that turns the challenges into opportunities for social and economic development, but also how they feed upon the core competencies of the economic root system in order to manage this task.

Thus this Bornholm study builds on the previous studies of Åland and the Faroe Islands in that it attempts to further refine the concept of innovative capacity. In the first phase of understanding innovative capacity, further frameworks of analysis are introduced.

First, drawing inspiration from other conceptualisations of capacity such as “institutional capacity”, innovative capacity can be understood of two different types of resources. de Magalhaes et. Al (2002). developed a method for evaluating institutional capacity in the analysis of urban governance and city centre regeneration⁸. This method has also been used as a frame of reference for assessing the relationship between decentralisation processes and sustainable development in local institutions in France,

⁷ Ibid p. 113.

⁸ De Magalhaes C., Healy P., Madanipour A. (2002). Assessing Institutional Capacity for City Centre Regeneration: Newcastle's Grainger Town. Urban Governance, Institutional Capacity and Social Milieux, Ashgate Publishing Ltd, England.

Sweden and Russia⁹. The same framework (with some slight modifications) will be employed in this evaluation.

For analytical purposes, institutional capacity can be divided in three main components; ***Knowledge resources, relational resources and mobilization capacity*** (de Magalhaes C., Healy P., Madanipour A., 2002).

- **Knowledge resources** refer to “the flow of knowledge of various kinds between stakeholders in a locality, and the learning process that takes place as knowledge is exchanged” as well as the frame of reference and the openness or learning capacity of stakeholders.
- **Relational resources** refer to “the quality of relational networks brought into the governance process by the stakeholders”, thus the social networks including their integration and functioning.
- **Mobilization capacity** refers to “the capacity of stakeholders to mobilize knowledge and relational resources to act collectively at the level of the city/region/neighbourhood for some common goal”, as well as techniques to realize this. Mobilization is often stimulated by “skilled change agents”¹⁰.

Discussed in a similar way, de Magalhaes C et.al. (2002) quote, Tarrow (1994) who brings these elements together in a similar discussion of the dynamics of social movements: Tarrow identifies four key dimensions to such dynamics: **a political opportunity structure**, the availability of “**symbolic frames**” of reference around which people can mobilise, the existence of **social networks** connecting the leader and the core of a movement to its base, and the “**repertoires**” of ways of acting to achieve change”. (2002:57).

2.4 Theoretical and Empirical Constructs of Innovative Capacity

The above framework of analysis, meant as a tool to understand institutional capacity, fits in extremely well as a means to conceptualise and further develop innovative capacity. Innovative capacity in the autonomous regions study is very much related to the political opportunity structure. Autonomous regions act within a political structure that encourages, or indeed, demands that independent actions are taken to deal with economic crises. Symbolic frameworks, like the prevailing power structures are also part of the framework of reference for underpinning innovative capacity. Such

⁹ Veylon, Baptiste (2004) Decentralization and Sustainable Development: Local Institutional Barriers and Opportunities for Sustainable Development, Master of Science Thesis 04-061, KTH Master Programme Series. Stockholm.

¹⁰ *ibid*

frameworks of “independency” or “go it alone” are fairly common for autonomous regions, even Bornholm, which is not autonomous from the national entity (Denmark), but nevertheless has a rather independent island identity, even though at the end of the day, regional development policy in Denmark may form an important support function.

Like institutional capacity, innovative capacity is built around the social networks and relational resources among actors. And in sum, innovative capacity is dependent on the mobilisation capacity of actors to rally knowledge resources and relational resources to achieve a goal such as economic growth or regional development.

In the second stage of defining innovative capacity in the Bornholm study, interviewees were specifically asked to define what they thought innovative capacity was and if they felt that this type of capacity existed on Bornholm. No prompting of the answer was given by the interviewer, except to say that this study used the concepts of economic and innovative capacity in its framework of analysis. Nearly all interviewees mentioned that a vital element of innovative capacity was the ability to accept change and to find creative ways for dealing with constantly changing circumstances.

Replies to defining innovative capacity in the *Bornholm context* included the following anecdotal definitions:

- “Innovative capacity is really “human resources”. The most important aspect of this is the *relational capacity or relational resources*. This is what is needed on Bornholm”
- “Innovative capacity is the ability to develop new projects and services to meet the demands of the market. It is not necessarily dramatic innovation, but rather new development”
- “Innovative capacity can be an individual attribute.... Innovative capacity is a mindset; the willingness to change and the capacity to adapt”
- “Innovative capacity is people with strong ideas that they can put together in *an environment where they can grow*”
- “Innovative capacity is the *ability to adapt and react to change*... it is the ability to accept change and move forward”
- “Innovative capacity is the ability to change when you see things around you changing. It is *being ahead of the game* and able to *take advantage of the new possibilities brought about by change*”

From the above definitions we see that interview subjects on Bornholm intuitively defined innovative capacity in much the same way as the project definition to deal with the change implied in external threats and to use changing circumstances as a possibility for development. In particular the relational aspects of institutional capacity were highlighted, as well as the actor-oriented aspects. Innovative capacity is something that citizens, businesses and other stakeholders have as a mindset and which is translated into action.

All interviewees felt that innovative capacity definitely existed on Bornholm, but not necessarily in the degree needed to deal with all external threats the island is experiencing. When asked if they felt that innovative capacity existed on Bornholm nearly all replied “Yes, but not enough!”.

In this study of Bornholm we will focus on the innovative capacity aspects of economic capacity, particularly dealing with the relationship between the regional responsibility Bornholm enjoys, its regional development and the innovative capacity to facilitate regional development. In doing so, the focus will be on the knowledge-based resources, relational resources and mobilisation capacity existing on Bornholm for its economic growth and regional development.

3. Describing the “Root System”: The Rise and Fall of Traditional Core Competencies on Bornholm

This chapter provides a picture of the historical underpinnings of “traditional core competencies” on Bornholm in an economic historical perspective. After first introducing some basic facts about the island, this chapter discusses briefly how the system bearing up the economic capacity on Bornholm has been “rooted” on the island, including some of the contextual factors that have contributed to the Bornholm traditional identity, such as its special regional status. It then describes how these factors have influenced the current situation on the island and the generally agreed upon picture of modern day strengths, weaknesses, opportunities and threats. While this chapter may paint a somewhat bleak picture of Bornholm’s conventional opportunities to support economic and innovative capacity, it is worth noting that the subsequent chapter will focus on the myriad of efforts that are beginning to produce very positive results in this aspect.

3.1 The “Pearl of the Baltic Sea”

Legend has it that when the Gods had finished creating Scandinavia they were so impressed with their work that they decided to create a microcosm of their fruits. Thus they took the mountains from Norway, the forests from Sweden and the sandy beaches from Northwest Jutland and then added to the mix rolling farmlands and meadows and cast this miniature into the Baltic Sea. Thus the island of Bornholm or the “Pearl of the Baltic Sea” was born; an island encompassing varied and beautiful geographic features.

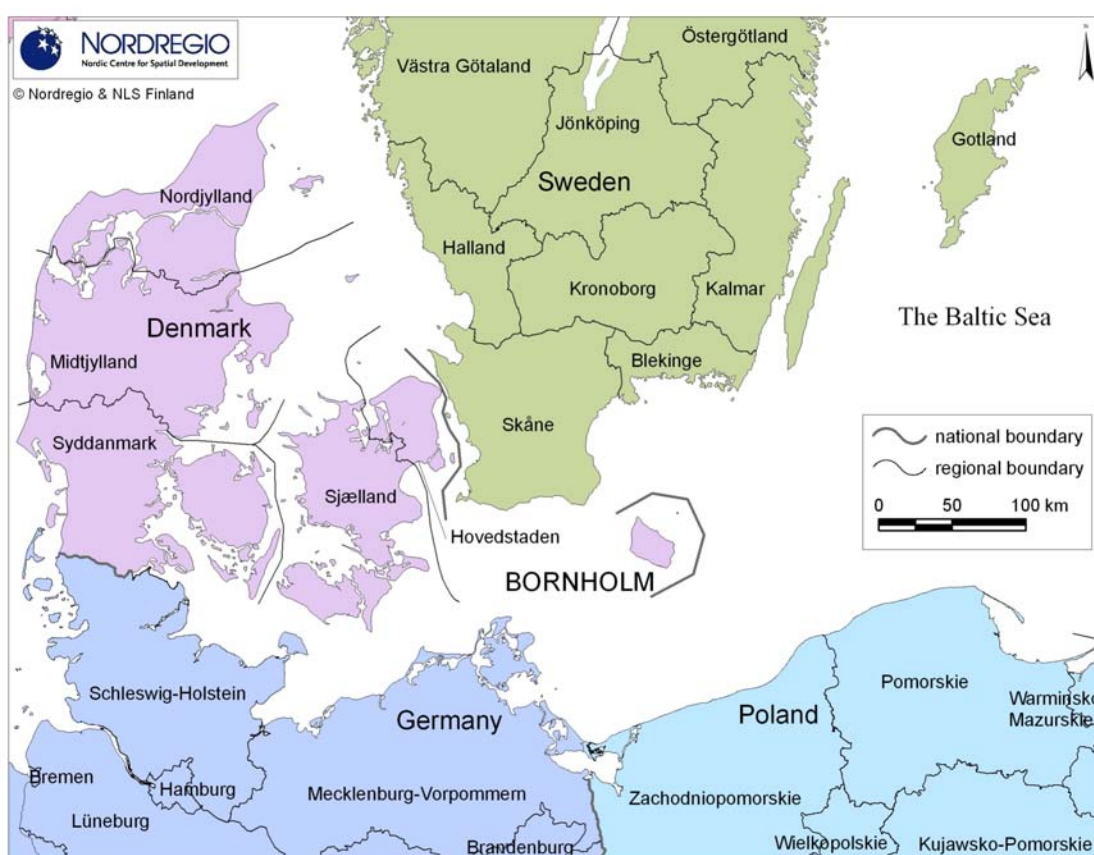
Bornholm is indeed an island lying in the Baltic Sea, roughly 150 km south east of Copenhagen and 40km south of the region of Skåne in Sweden. Geographically Bornholm lies in the far periphery of the Danish mainland; although the island’s spatial position in a Baltic Sea perspective is extremely strategic. Bornholm is actually situated geographically closer to Sweden, Poland and Germany than to the mainland of Denmark.

With an area of 588 km² the island of Bornholm is the largest geographic municipality in the new Region Hovedstaden (the Copenhagen and adjoining municipalities), but with a population density of only 73 inh./km² is the least densely populated municipality in the Region Hovedstaden. Since 2004 the municipality has had the status of a “Regionskommune”, (both a region and a municipality at the same time) and has

retained this status despite it being integrated into the Region Hovedstaden in connection with the regional reform of 2007.

In 1901 the population of Bornholm was 40,900 which at the time was 1.6 percent of the Danish population. In 1997 the population reached 45,018 but by 2001 this figure was 44,216 and in 2007 it was 43,135. Throughout the latter part of the 20th century, and until recent years, Bornholm accounted for more or less 1% of the Danish population, making it an interesting microcosm of the Danish nation.

Figure 1: Bornholm as a Danish region



Bornholm is not autonomous in the same way as Åland, the Faroe Islands and Greenland, but does have some elements of its own regional “responsibility”. Following the latest phase of regional and administrative reforms in 2007 in Denmark which amalgamated 14 *amts* (counties) into 5 regions, Bornholm is now a part of the Region Hovedstaden (composed of the Greater Copenhagen region plus Nordsjælland as well as Bornholm). However Bornholm maintains its status as a Regionskommune and is allotted two seats in the parliament (figured on a regional basis) and retains its responsibility for regional development. Thus Bornholm was also given the mandate and opportunity of developing its own Growth Forum (Vækstforum), to work in parallel with the Growth Forums of the five Danish regions.

Although Bornholm has become part of the Region Hovedstaden on 1 January 2007, the general populace has not been affected to a great degree, except for the fact that “*Bornholmere*” (residents of Bornholm”) now enjoy the health and medical care system of the Region Hovedstaden. Traditionally Bornholm has focused its energy on building relationships with the other parts of the Baltic Sea region, such as Poland, and even local politicians are just now awaking to the possibilities that regional reform could have for creating better relationships with particularly the Copenhagen region¹¹.

Bornholm has been a forerunner even in terms of the municipal reforms that have characterised the process of regional governance in Denmark in the 21st century. In a referendum of 2001 Bornholmere voluntarily decided to merge the then five municipalities of Allinge-Gudhjem, Hasle, Nexø, Rønne and Aakirkeby and one county (*amt*) into one entity. On 1 January 2003, the Bornholm Regional Municipality (Regionskommune) was born, possessing the powers of both a local authority and a region (*amt*). At the time only Copenhagen and Frederiksberg were also classified as Regionskommuner, but Bornholm, unlike these other two was not classified as a “city region” since it was obviously not a metropolis. Bornholm became something of an example and a test case for the continued process of Danish municipal and regional reform in the following years.

On 10 October 2007 the European Commission approved that Bornholm (and ten other Danish areas) may continue to be seen as regions (corresponding to the NUTS3 level) for European purposes. This has concrete ramifications in several areas of regional development, but primarily regarding the collection of statistical data and thus the visibility of Bornholm in EU statistics, effectively ensuring that the specific position of Bornholm will not be “swallowed up” or diluted as part of the Region Hovedstaden. Regional status also makes it possible to cooperate in various EU cross-border cooperation programmes (the Øresund INTERREG IVA programme and the South Baltic Sea INTERREG IVA programme)¹²

3.2 The evolving Bornholm identity

Bornholmere tend to have both a very Danish identity and an autonomous, independent identity. Bornholmere *are* Danish and *feel* Danish, but at the same time feel quite removed, both geographically and emotionally, from the mainland. Perhaps this is not as strange as it sounds. Bornholmere also have a very “insular” identity, the obvious

¹¹ Interview on Bornholm 23 August 2007.

¹² Bornholms Regionskommune (2007) Referat: Økonomi- og Erhvervsudvalget: den 20. november 2007- Økonomi- og Erhvervsudvalget ordinært møde.

result of living in an island community. Islanders tend to have a strong sense of territorial appropriation, perhaps because island communities are usually fairly small scale territorial-wise and thus inhabitants know the confined territory in a way that is not possible with contingent territory. Also because the border demarcation of an island is very visible, this creates a manifest “we and other” imagined community that increases this feeling of territorialisation¹³.

At the same time, Bornholmere enjoy a very international identity and see themselves as a vital part of the Baltic Sea Region. Seen from the Danish mainland, Bornholmere are often called “Semi-Swedes” since the local dialect sounds closer to Swedish than to Danish for many Danes¹⁴. This reinforces their identity as “Danes but not Danes”.

Many have pointed out historical events as causing this sense of “split identity”. After the Swedish King Karl the 10th transported his army over the Stora and Lilla Bält a peace agreement was signed between Sweden and Denmark in Roskilde in 1658. One element of this peace agreement was that Bornholm would be ceded to the Swedes. But when the Swedish troops arrived on Bornholm they met with hard resistance from the local population. Despite the fact that Bornholm never petitioned help from Danish troops they nevertheless managed to drive out the Swedes and asked to be returned to Denmark, which was accomplished in 1660. The inhabitants of Bornholm in this time of crises thus requested to belong to Denmark, after several hundred years of domination by alternately Sweden, Lübeck and Denmark.

During World War II, Denmark (including Bornholm) was occupied by the Germans. At the end of the war, Bornholm was “liberated” by the Soviet Union and thus Bornholmere actually lived behind the iron curtain for a year. At this point in time Bornholmere felt that the Danish mainland had all but forgotten the island in their time of need.

These two historical incidents seem to set the stage for the search for a Bornholm identity. They are often quoted as the point of departure for understanding the dichotomy inherent in Bornholm’s strong local identity as well as a sometimes conflicting national identity. This dichotomy will be revisited and further analysed in Chapter 4.

¹³ Grunfelder, J. (2007) Insular Territories and Polycentricity: Functional approach of polycentric structures from islands: Elaboration of a model for the study case of Åland Islands Autonomous Territory. Master of Science Thesis. Kungliga Tekniska Högskolan, Division of Urban and regional Studies.. Stockholm SoM-EX 07-02.

¹⁴ Dahlström, M. et al. (2006) How to make a Living in Insular Areas – Six Nordic Cases. Nordregio Report 2006:1.

3.3 Traditional Industries on Bornholm

Agriculture on Bornholm has been important since the Stone Age and into the 21st century. Traditional crops at the end of the 20th century have been cereals (primarily wheat and barley, mainly used for fodder) as well as dairy, pork and chicken farming, which have been gaining in importance in recent years. Farms have been rather small enterprises and Bornholm boasts many different types of fertile soil.

During the middle ages Bornholm's industrial structure was highly influenced by the Hanseatic League due to its strategic position in the middle of the Baltic Sea where it served as an important intersect for journeys between the Hanseatic members. In the 14th and 15th centuries Rønne in particular gained importance as an important hanseatic harbour town. Since the Hanseatic League was composed of Catholic societies, the demand for Bornholmian fish, particularly herring, provided the impetus for Bornholmers to take up fishery as an economic pursuit and in the early 1500s Bornholm saw the rise of its fishing industry as a rival to the already strong agricultural industry. From the 1660s on, the fishing industry on Bornholm flourished.

Fisheries and the fishing industry, including satellite industries such as fish processing, packaging and the smokehouse activity, grew in importance in the 1800s and 1900s. Later the light metals industry, producing equipment for fish processing and was also an industry stemming from the core fishing industry and a plethora of small and medium-sized enterprises that almost solely served the fishing fleet and processing industries. Smokehouse activity, which was so vital in the early 1900s has now declined as a commercial industry, but several smokehouses remain as cultural tourist sites where visitors can still enjoy their smoked fish products and the architecture of the remaining smokehouses now produce loads of local "flavour" to communities. Granite and sandstone quarrying were also important on Bornholm in the 1700s as well as cattle export.

From the beginning of the 1900's a new industry began to grow on Bornholm – the tourism industry, although at the turn of the last century it was mainly German tourists who visited the island. After World War II the island's isolated geographical position and occupations acted as a brake to modern development. This changed however with the arrival of modern car ferries to and from Copenhagen and Ystad (in Sweden) which greatly increased the accessibility of the Island and its development, particularly tourism¹⁵. Since then, the opening of the Öresunds Bridge has been the next most important event for increasing accessibility by greatly reducing travel times to Copenhagen.

¹⁵ http://www.archipelago.nu/SKARGARD/ENGELSKA/DENMARK/bornholm_history.htm

3.4 The Rise and Fall of the Modern Core Industries

The modern heydays on Bornholm began in the 1970s. Between 1970 and 1990 the employment rate on Bornholm rose by almost 10%, mirroring then the Danish national average. From this time until 1986 the employment rate roughly followed the trends in the rest of Denmark, even if the increase up until 1987 was relatively weak¹⁶. This trend was broken in 1987 when the employment rate drastically fell and gave rise to a net migration in 1988 of 344 persons from the island.

During the 1970s and beginning of the 1980s, Bornholm's economic development trend was at a slightly higher level than the national average, and in contrast to other regions in the country at the time, the fishing industry and agriculture actually carried Bornholm's regional development. But starting the mid 1980s Bornholm began to experience a serious decline in these areas as indeed the economic recession was making its mark in all of Denmark.

Bornholm was particularly hard hit, however, by the recession as it occurred in tandem with structural changes in the fishery and fishing industries. Fishing production in Bornholm was more than halved from 1980 to 1992 due to quotas and the strong external competition that was felt from other parts of the world. The core competency of the fishing industry was effectively being hollowed out, although the satellite industries remained strong for the time being. The fish processing industries, for instance, managed to stay vital for a bit longer based on deliveries of fish from the Baltic States, and Bornholm housed the processing industry that packaged all of the European fish for the fast-food giant Mc Donald's. But finally many of these were forced to move due to the increased competition in the globalised economy, although as an industry, fish packaging on Bornholm still has a presence on the island.

Agriculture on Bornholm has had a similar development, with slightly rising production until the early 1990s, but with a drop in relative prices and employment opportunities. Historically Denmark has been an agricultural country, even if employment opportunities in this field have been diminishing rapidly, agriculture has remained important for growth creation and export. Yet agriculture is especially vulnerable to the impacts of structural change and "in their quest for efficiency gains, farms become ever

¹⁶ Schønemann, Steen (1994). Bornholms befolkning, erhvervsstruktur og udvikling. Bornholms Forskningscenter. March 1994.

larger due to merging and land acquisition”¹⁷. This same dynamic was experienced on Bornholm, although as a small island community, farmers had little space to actually expand as the confines of the island make it difficult to increase areas of production. However rather than expanding in size, farmers on Bornholm are now becoming more efficient in their production and focusing on value-added opportunities from agricultural products, such as slaughterhouse waste or wood waste, or in producing speciality products from traditional crops, such as rapeseed oil for cooking.

Figure 2: Changing shares of gross output in primary sectors on Bornholm 1988-1995

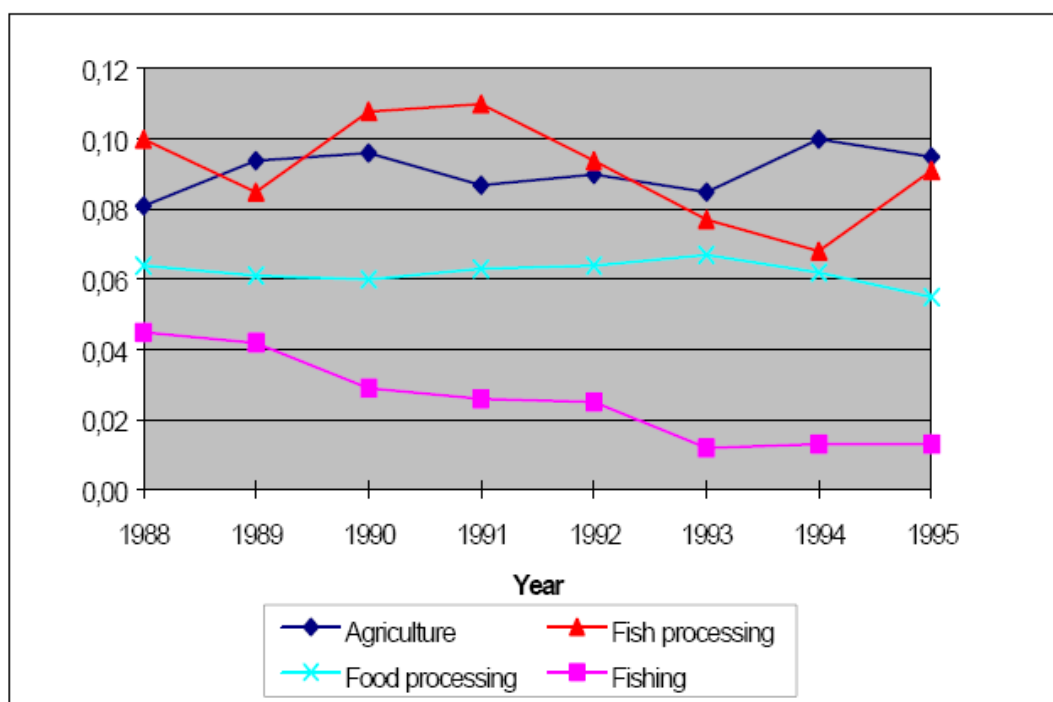


Figure Source: Regional data are from AKF, Denmark. The calculation is also based on a fixed price. From Zhang, Jie and Rassing, Charlotte R. (2000) Tourism Impact Studies: The Case of Bornholm. Research Centre of Bornholm

Figure 2 shows changing shares of gross output in the main primary sectors on Bornholm in 1988-1995. While fishing has seen a steady decline during the period, agriculture had experienced a fairly flat trend, as did the food processing industries. The fish processing industry has had a much more erratic trend.

The ensuing high rates of unemployment due to the loss of job opportunities in the fishing and agricultural sectors meant that there were fewer possibilities on the island and young people began to migrate to the mainland. Bornholm was then even more dramatically separated from the rest of Denmark. The culmination came in the beginning of the 1990s when the political establishment of the island appealed to the

¹⁷ Dahlström, M. et al. (2006) How to make a Living in Insular Areas – Six Nordic Cases. Nordregio Report 2006:1. p. 26.

national government and the “Bornholm Pakken” or Bornholm Package of 1992 was launched.

3.5 “Bornholm Pakken”

Several of the measures in the Bornholm Pakken were traditional regional policy instruments such as tax reductions and subventions, but it also included several capacity building measures such as the establishment of a glass and ceramic school and a research institute for the development of peripheral areas and with a focus on tourism-driven development as a new growth area, the Centre for Regional and Tourism Research in Nexø (CRT). In an outward-looking vein, capacity building measures were also extended to the newly independent states in the Eastern Baltic Sea Region, with the instigation of the Project Baltic Educational Island, which was directed towards making Bornholm a centre for education of the newly independent eastern Baltic Sea countries.

Unemployment during this period rose to a greater extent on Bornholm than in other parts of the country. While it was realised that the tourism industry could play an important role in turning the economy around the number of tourists during the early 1990s grew at a weaker rate than in other parts of Denmark¹⁸. Still Bornholm did not experience such catastrophic unemployment rates as did other parts of Denmark. Even in terms of population growth, the trend had been fairly slow. In 1901 the island was home to a population of 40,000 persons. In 1993 this number had only increased to 45,000 (although at one point in 1960 Bornholm boasted a population of over 48,000¹⁹).

In addition to the lack of job opportunities on the island, another contributing reason to the negative demographic trend is the poor access to higher education on Bornholm. Young people are forced to leave the island in pursuit of higher education and rarely have a job opportunity to return to. Thus Bornholm was losing its ability to attract and maintain even its original population.

3.6 Economic Structure in the 1990s

In 1992 agriculture represented 4.6 percent of Bornholm’s business earnings in prices for that year (compared with 2.9 percent for all of Denmark), fisheries represented 2.0 percent of the total business earnings (compared to 0.2 percent for Denmark) and raw material extraction was 0.2 percent of the business earnings (compared to 0.8 percent for all of Denmark). Other non-primary industries accounted for 14.3 percent of the

¹⁸ Schønemann, Steen (1994). Bornholms befolkning, erhvervsstruktur og udvikling. Bornholms Forskningscenter. March 1994.

¹⁹ *ibid.*

business earnings, with the fishing industry representing 3,8 percent of this or over a third of the total industrial earnings, far, far above the national average of 0.3 percent! This gives testimony to the continued importance of the fishing industry in Bornholm's economic structure, even in its period of decline. Services were 78.8 percent (compared to the 75.3 percent for Denmark as a whole) of business earnings. The tourism segment of these services was 4.3 percent, nearly double the Danish average of 2.4 percent²⁰.

In the 1990s most of Bornholm's export products were still fishery and agricultural goods. As a large portion of Bornholm's export industry is regulated by quotas within the European Union and the Baltic Fishing Commission, it became increasingly difficult to increase production, causing stagnation within these industries.

The business and industrial community of Bornholm today is made up almost exclusively of small and medium sized enterprises. The primary sectors (agriculture, fishing, forestry and mineral extraction) are now responsible only 6 % of the jobs on the island) while industries employ 12% of the workforce. Services now account for over 40% of the total employed workforce (figure 3).

Figure 3: Employment by branch on Bornholm, 2006

Bornholms Regionskommune: Employment by branch 2006	
<i>Source: Statistik Danmark</i>	% of total employed
Agriculture, fisheries and mineral extraction	6
Industry	12
Energy and water provision	1
Building and construction	7
Trade, hotel and restaurant	19
Transport, post and tele	7
Finance and industrial services	7
Public and personal services	41

The tourism industry in particular is becoming a force to be reckoned with. Already the trade, hotel and restaurant branch employs 19% of Bornholm's workforce (although this figure undoubtedly includes many part-time and seasonal workers). A larger grouping of the tourism and other industries, the "experience economy" is promising. On

²⁰ Schønemann, Steen (1994). Bornholms befolkning, erhvervsstruktur og udvikling. Bornholms Forskningscenter. March 1994.

Bornholm this experience economy is seen as branches in advanced service economy that deliver experiences in the form of products or services that have an aesthetic expression, tell exciting stories, express values or lifestyles or convey historical or scientific information in a way that precipitates a reaction from the receiver²¹. A counterpart to the tourism industry is the transport service sector. The arts and crafts sub-sector is also a growing industry. While ceramics have always had an important economic place on the island, the arts and crafts industry continues to expand and diversify its offerings.

Of the export oriented business on Bornholm, the regional foodstuffs group accounts for 9% of all growth creation, whereas light industry and engineering accounts for 2% and the hotel and restaurant and other industries account for 3%. In agriculture today, Bornholm has been active in developing some quite uniquely marketed Bornholm products, such as the Bornholm Danablue Cheese. Transport industries make up 6% of the growth creation on Bornholm.

Still productivity remains fairly low. The experience economy is the only branch on Bornholm with a higher productivity rate than the rest of the country²². As an island quite far from the mainland with relatively limited accessibility to the rest of Denmark, Bornholm's labour market is confined, as daily commuting to other parts of Denmark or even Sweden is difficult. In 2006, 3.4 % of those that worked on Bornholm commuted in from other municipalities, while 6.1 % of those who lived on Bornholm commuted to municipalities off the island. This is by far the lowest number of in and out commuters of any other municipality in Denmark²³, but is nevertheless quite a large percentage for Bornholm. In the Nordregio report on "How to make a living in insular areas" the chapter on Bornholm made a specific link between population trends, commuting possibilities and regional development: "In insular regions there is very often a conjunction between the development in populations trends and the state of the region's economic development, because the possibilities for commuting to and from the local labour markets are strongly limited compared with labour markets close to economic centres²⁴".

This is one of the contributing factors in Bornholm's regional development. In 2005

²¹ Feldthus Andersen, Lene et al (2006) Bornholm i Oplevelseøkonomien- Vad er fakta? Center for Regional - og Turismeforskning. Nexø, Danmark.

²² Centre for Regional-og Turismeforskning. Bornholmske erhvervsindikatorer præsentation for det Regionale Vækstforum den 23. juni 2006 <http://www.brk.dk/EverestInet/showdoc.asp?id=060622160222&type=doc&pdf=true>

²³ Statistik Danmark (2007). Statistisk Årbog 2007. Tabel 118 Ind- og udpendling for større kommuner. 2006. Danmarks Statistik, København.

²⁴ Dahlström, M. et al. (2006) How to make a Living in Insular Areas – Six Nordic Cases. Nordregio Report 2006:1. p. 24.

Bornholms Regionskommune had a GDP per capita of DKK 194,000 (in 2005 prices). This is compared to a GDP per capita for all of Denmark of DKK 287,000. Seen in index figures where the entire country is 100, Bornholm had a GDP per capita development of 68 compared to the other amts of the time (only Storstrøms Amt was lower with a GDP per capita compared to index of 100 of 67)²⁵. Thus growth and development is a major concern on the island.

3.7 Current Bornholm trends: The SWOT

There are several academic ways in which to approach the analysis of the external threats and internal possibilities on Bornholm today. However this section will build upon secondary documentary evidence and reports, as well as results from face-to-face interviews on Bornholm in August 2007. Key among the documentary evidence is a Working Paper published by the Centre for Regional and Tourism Research on Bornholm in December 2004, entitled “Bornholms udviklingsmuligheder – en SWOT-analyse”. This SWOT²⁶ analysis was commissioned by the partners in the forerunner to the Growth Forum and many of those interviewed on Bornholm referred specifically to this report as showing succinctly the socio-economic situation on Bornholm.

According to the SWOT report, the development tendencies on Bornholm (as well as elsewhere in the Nordic countries) are:

- A shift to more immaterial concerns regarding lifestyle, as possibilities to move household for a better quality of life
- Globalisation, which is leading to greater demands on own productivity and a focus on competitive core competencies.
- The digital revolution, and the possibilities this opens for communication and distance working
- Individualisation and free choice, where individuals strive to realise their potential in various ways

These tendencies present both threats and potentials for Bornholm.

According to the SWOT analysis, the overarching strengths on Bornholm include:

- A unique and special natural heritage
- The strong island and local identity among the population, including authorities and various sectors
- A secure and safe environment for children, youths and elderly
- A number of specialised and internationally competitive business areas

²⁵ Statistik Danmark (2007). Statistisk Årbog 2007. Tabel 399 Bruttonationalprodukt fordelt efter amter. 2005. Danmarks Statistik, København.

²⁶ S.W.O.T = Strengths, Weaknesses, Opportunities, Threats

Weaknesses on Bornholm are:

- Poor accessibility, in relation to transport time, capacity, frequency and economy
- The generally low level of education
- The lack of institutions to anchor Bornholm in the knowledge-economy
- A large number of sectors with declining job opportunities for the lowest educated employees

The opportunities on Bornholm are characterised as:

- The tendency to seek the closeness, the security and quality of life make Bornholm attractive
- Rising housing prices in the Greater Copenhagen areas make Bornholm a more attractive residential region economically
- Digitalisation and marketing have lead to greater opportunities for outsourcing and sub-contracting, which can improve the competitiveness of Bornholm businesses
- The possibilities for developing a business base for experience-based and lifestyle markets

And finally the threats to modern Bornholm include:

- Jobs for non-skilled workings are quickly disappearing
- The receding population due to the lack of jobs, which is a burden for the level of public service
- New jobs in growth industries need to be localised close to larger knowledge institutes
- Changes in the EU's regional development policy (Structural Funds) could mean that funds will not be available as previously

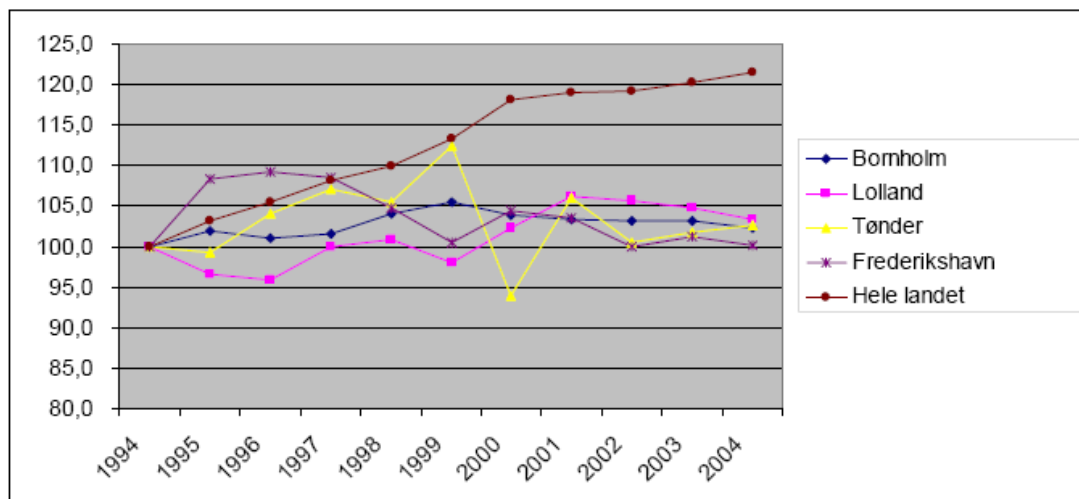
3.8 Internal/External Threats to Bornholm

For many years Bornholm has experienced a negative development in several central indicators including population demographics, income level and education level. But the collective threats and challenges to Bornholm are not so different from those affecting other lesser developed or peripheral regions in Europe. Bornholm, like many other regions, has been experienced a declining population trend since the 1990s and unchanging growth trends. In Figure 4 we see GDP per capita growth trends (from index) for Denmark as a whole (brown circles) and four other peripheral Danish regions, including Bornholm. While Denmark as a whole has experienced high growth in GDP per capita since 1994, Bornholm and the other regions have remained at a fairly stable level.

If GDP per capita trends have remained stable on Bornholm, population trends, on the other hand, have show a more disappointing trend, performing much poorer (from

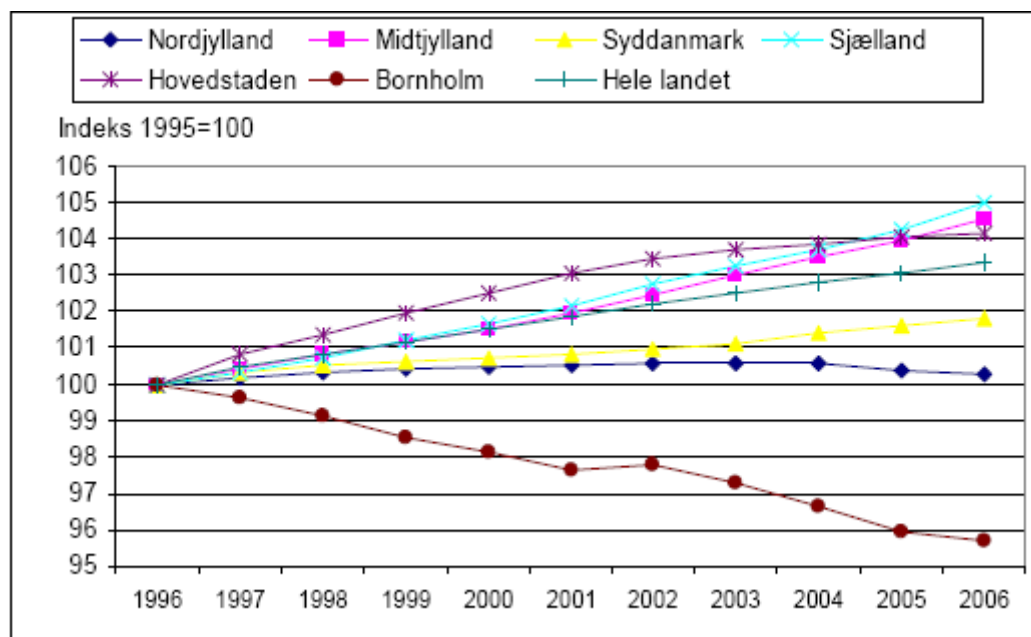
index) than Denmark as a whole and any of the five new Danish regions, as shown in Figure 5.

Figure 4: Trends in GDP growth in Denmark and four peripheral Danish regions, 1994-2004



Source: Bornholmske erhvervsindikatorer præsentation for det Regionale Vækstforum den 23. juni 2006
<http://www.brk.dk/EverestInet/showdoc.asp?id=060622160222&type=doc&pdf=true>

Figure 5: Regional population trends, 1996-2006



Source: Danmarks Statistik and Program for Den Europæiske Regionalfond I Danmark 2007-2013 Regional konkurrenceevne og beskæftigelse "Innovation og Viden".

Prognoses for population development follow much of the same trends. What is more, as the share of elderly persons compared to those in working life increases, there will be considerably fewer potential workers to bear the costs of the welfare system. Again the prognosis for Bornholm is bleaker than for the rest of the country and each region, as Bornholm is expected to see a decrease in the share of population that is of active employment age (16-66 years) of 10%, as shown in Figure 6.

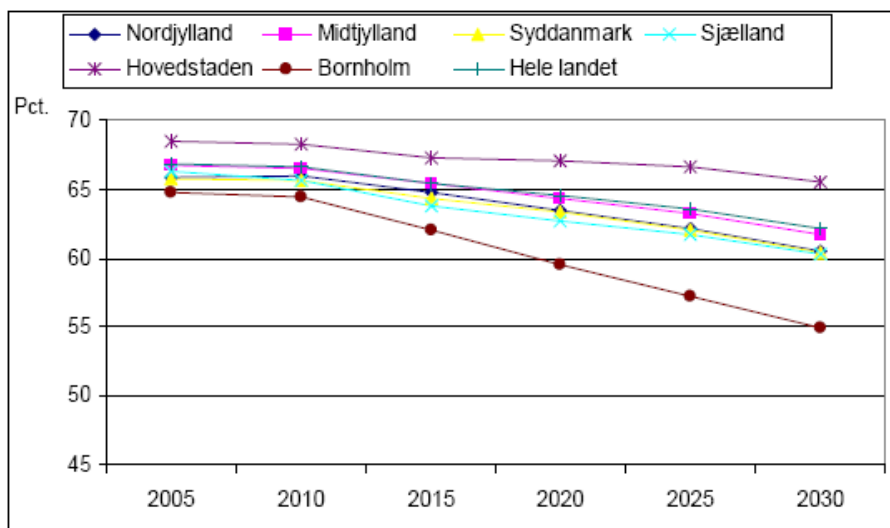
Like many regions in Europe this trend is aggravated by young people leaving the island and not returning. As the labour market is confined by geographical boundaries and commuting is impractical and expensive, it is difficult to attract two-income families to the island without the promise of providing fulfilling jobs for both partners.

The level of general education on Bornholm is lower than any other region in Denmark and this was a fact much bemoaned by all of the interview subjects in the study. Figure 7 shows a description of the educational level of the Danish labour force in terms of the index of the labour force that has been involved in higher education.

As seen in Figure 7, Bornholm's work force is half as likely to have a higher education as the labour force in the Region Hovedstaden, and the rate is additionally lower than the other four regions. However it is notable that Bornholm has the highest level of technical education among its workers, (46%) compared to only about 30% in the Copenhagen region²⁷.

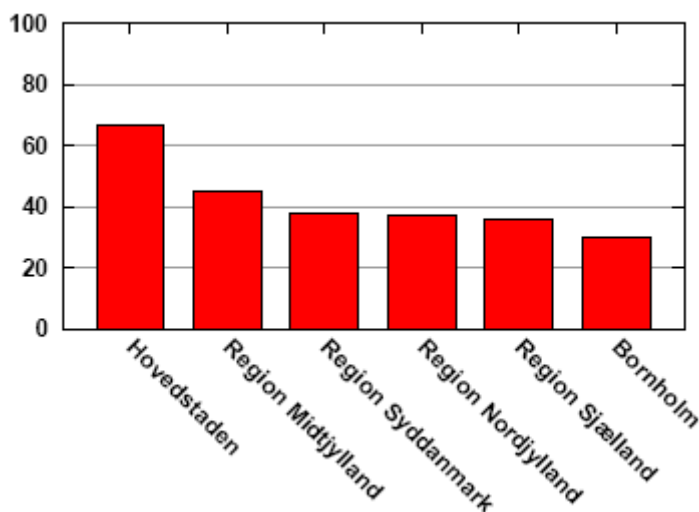
²⁷ Den Europæiske Regionalfond I Danmark 2007-2013 Regional konkurrenceevne og beskæftigelse "Innovation og Viden" (2007:20).

**Figure 6: Share of population in active employment ages (16-66 years)
prognosis: 2005-2030**



Source: Danmarks Statistiks befolkningsfremskrivning and Program for Den Europæiske Regionalfond I Danmark 2007-2013 Regional konkurrenceevne og beskæftigelse “Innovation og Viden”.

Figure 7: Labour force Education Level, 2005



Source: Erhvervs- og Byggestyrelsens regionale vækstmodel, 2006.

Interviewees consistently quoted the most important threats to Bornholm to be mainly these internal challenges: a declining population, but an increase in the number of elderly, lack of education, lack of job opportunities and lack of skilled workers for the opportunities that are on the island. Although unemployment is quite low on the island

(5-6% and this is mainly the chronically unemployed) the number of new jobs created is unsatisfactory, and indeed Bornholm is pointed out in the Danish Operational Programme for EU Structural Funds in the 2007-2013 period to be the only region that will not fulfil the national and EU Lisbon goal for growth, jobs and sustainable development!²⁸ Only the machinery and hotel and restaurant industries on Bornholm have had increases in the number of jobs created since 2001²⁹.

These threats point to the critical *mismatch* between supply and demand for workers on the labour market. Industries desperately need qualified workers, but the majority of young people interested in qualified jobs move off the island to study and rarely return. The remaining supply of labour does not have the formal educational qualifications to perform the necessary tasks. On top of this situation there is no real centre for higher education on Bornholm.

In a report published by Bornholms Akademi and the Centre for Regional and Tourism Research and written for Bornholm's Growth Forum on the barriers and potentials for competence development on Bornholm, it is stated that Bornholm is characterised by a labour force with a low level of formal education. There are many unqualified workers and few workers that engage in continuing education, and this contributes to the Bornholm labour market being more inflexible and vulnerable to unemployment and the bottlenecks experienced as a result of globalisation³⁰.

However this situation could be construed as part of the logical flow of events from the structural transformation that has occurred on Bornholm in the fishing industries and agricultural sectors. One by one, each established "branch" fell away and finally the traditional "trunk" of economic/innovative capacity was also slowly dying from the external threats of fishing quotas, agricultural policy, globalisation and environmental misuse. The competencies of the labour market have not been able to keep apace. However underneath the "root system" or core competency for building upon the uniqueness of Bornholm continues to live. The question is how Bornholm today can boost its economic and innovative capacity within the framework of its regional development.

²⁸ Den Europæiske Regionalfond I Danmark 2007-2013 Regional konkurrenceevne og beskæftigelse "Innovation og Viden" (2007:20).

²⁹ Centre for Regional-og Turismforskning (2006) Bornholmske erhvervsindikatorer præsentation for det Regionale Vækstforum den 23. juni 2006 <http://www.brk.dk/EverestInet/showdoc.asp?id=060622160222&type=doc&pdf=true>

³⁰ Bornholms Akademi og Centre for Regional-og Turismforskning (2006) Kompetenceudvikling på Bornholm – barrierer og potentialer: Afrapportering til Bornholms Vækstforum. Juni 2006.

4. Economic and Innovative capacity for regional development

This chapter discusses in detail how Bornholm is currently attempting to build up its economic and particularly its innovative capacity in order to drive its own regional development. In the sections above the line of argumentation focused primarily on delineating the external threats facing Bornholm. In this section the tables will be turned and focus on the courses of action taken by Bornholm to “...*avert external threats and take advantage of new opportunities through creative and effective utilisation of critical resources*”. In doing so this chapter attempts to trace how innovative capacity as the “trunk of the tree” nourishes the branches and limbs of regional economic development.

Currently the core competencies on Bornholm are rooted on shaky ground. Unlike Åland or the Faroe Islands, which have unique strong *unitary core competencies* Bornholm’s root system has been split between competencies in Agriculture and Fishing industries. But while being perhaps a bit unstable, Bornholm appears to be currently searching for ways to create a new core competency out of elements of both the agricultural and fishing industries. This seems to be manifesting itself in efforts to boost the tourism and experience economy as a new base for society. Could tourism and the experience economy thus be a way to unite economic and innovative capacity in a new core competency? Can the root system be nourished and regenerated in this way?

Before launching into an exploration of these questions and revisiting the framework of analysis that breaks innovative capacity down into the elements of knowledge resources, relational resources and mobilisation capacity, the first element in the economic and innovative capacity conceptualisation is explored: The significant actors.

4.1 Significant Actors on Bornholm

The delineation of the significant actors on Bornholm was made by the technique of asking interviewees to name who they believed significant actors were. Not surprisingly, individual interviewees tended to mention other interviewees. There is a largely unavoidable tautology in this method since in the methodology interview subjects were chosen on the basis of their representation of these actors, in initial contacts with Bornholm Regionkommun and The Centre for Regional and Tourism Research (CRT) and via Bornholm Regionkommun’s webpages (www.brk.dk). Nevertheless it is notable that these actors were pretty much consistent on the list of nearly every interviewee.

Centre for Regional and Tourism Research (CRT)

When asked to name the significant actors for regional development on the island all interviewees mentioned CRT (Centre for Regional and Tourism Research) in Nexø. As a part of the Bornholm Pakken and as a true regional policy decision CRT was not located in the main city of Rønne, but rather in the more peripheral part of the island outside the village of Nexø in an old sandstone quarry. While CRT began its life as a pure research institute, its role has evolved over time to become not only an observer of regional development, but one of the important actors for *instigating* regional development on Bornholm. Thus its products are not only applied scientific reports and workshops; the institute in itself is an institutional platform for local and international networks and has stepped in to help alleviate the demand for a higher education perspective on the island.

The three main areas of interests for CRT are 1) peripheral areas, islands and maritime communities, 2) business development and innovation and 3) policy and planning. Some of CRTs most important actions on Bornholm have been to build up stakeholder relations in the tourism industry and performing Bornholm's SWOT analysis. CRT is also an active member of the Growth Forum.

Bornholm Growth Forum

Instigated in connection with the Danish regional reform in 2007, the goal of the Regional Growth Forums in Denmark is to unleash national innovative capacity via the establishment of regional centres that serve as creative laboratories and catalysts for innovation. Each of the five new regions in Denmark, plus Bornholm, has thus created a Growth Forum.

The business development strategy for 2007-2010 worked out by the BornholmGrowth Forum focuses on the unique potentials of Bornholm, its history, geography and nature, as well as its unique competencies and possibilities for a lifestyle quality, by facilitating growth via creativity and quality, as eloquently pronounced in the title of the strategy report “The Unique Bornholm: Growth via Creativity and Quality!”³¹

An important part of the Bornholm Growth Forum is the “cluster” working groups (“klyngearbejdsgrupper”). These clusters represent the main business sectors on the island and each has a facilitator to assist with administration and support:

³¹ Bornholms Vækstforum (2007) Erhvervsudviklingsstrategi 2007-2010 “Det unikke Bornholm: Vækst via kreativitet og kvalitet!”. Februari 2007.

- Regional good stuffs
- Agriculture
- Tourism
- The “experience or adventure” economy
- Light industry and engineering
- Building and construction

The short-term goal of the cluster work is to gather input to the development and implementation of a business development strategy for Bornholm. In the longer-term, the idea is that businesses and industries on the island will begin to work together for common product development, solve common problems find common opportunities and create growth on Bornholm³².

LAG and small food producers

LAG Bornholm (the Local Action Group on Bornholm) was created during the preparation of the LEADER+ programme in 2001 as an independent Non-Governmental Organisation (NGO) and was composed of 12-13 organisations in partnership, including: the municipality, the county (the then amt), the food producers sector, and the handicraft sector. The goal of LAG is to facilitate relational networks of actors on Bornholm to achieve locally grounded development in a bottom-up manner. LAG is also in the process of developing Bornholm’s local development strategy for the 2007-2013 period under the framework of the Rural Development programme. As such LAG is currently working to find new forms of cooperation and to collectively market the small food producers on the island, which with LAG’s help are rapidly becoming a cluster of innovative entrepreneurs.

The local development strategy developed by LAG is composed of eight strategic areas for intervention:

- The Craftsman’s Island
- Regional quality foodstuffs
- The House of Business (“Erhvervshuse”): creative working communities
- Bornholm as a healthy island
- Bornholm – self-sufficiency in sustainable energy
- Citizen Participation and Local Development
- Nature as a resource
- Fish, Sea and Port – the development of the fishery industry in the “adventure tourism” economy

³² www.brk.dk/brk/site.aspx?p=21014

Jensen Denmark

Jensen Denmark, producing Flatware equipment for heavy duty laundry equipment is the largest company on the island and accounts for 70% of all industrial employment. The company was established on Bornholm in 1937 and the Flatware unit produces machinery for preparation, feeding, ironing, folding and stacking of flatware and sorting and folding of towels. Today the Jensen Group encompasses producers in Denmark, Sweden, Switzerland, Germany and the US. In 2005 the Jensen Group had a turn over of DDK 1.3 billion. As the largest company on Bornholm today, the Jensen Group has increased its employment staff by 100 workers since 2003 in its factory in Rønne.

The director of the company's Flatwork Technology, Steen Nielsen, has also been a very pro-active partner in developing the Bornholm Growth Forum's Business Development Strategy ("Det unikke Bornholm") and is also part of the work of the "light industry and engineering" cluster. The biggest challenge for Jensen AS on Bornholm, as with most of the other businesses, is getting access to qualified workers and thus Jensen is active in launching opportunities to increase the competence of labour in general on the island and increase awareness of the possibilities, ie through apprenticeship programmes.

Bornholm's Enterprise Ambassador (Erhvervsambasador)

Created in 2006 as a result of a coalition agreement between the political parties in the majority on Bornholm, the Enterprise Ambassador (*Erhvervsambasador*) answers the demand of many politicians that business interests should literally sit next to the Mayor and be the eyes and ears of the business community. Previously on Bornholm the relationship between business interests, political interests and regional and municipal administrators were characterised more by competition than cooperation³³. Lene Grønning sits in the position as the first and current Enterprise Ambassador on Bornholm.

One of the duties of the Enterprise Ambassador is to "define and capture the soul of Bornholm". Rather than relying on a flock of expensive PR experts from Copenhagen to "brand" or help define Bornholm's identity, the Enterprise Ambassador has chosen to first call upon citizens to help with this matter, to develop a "brand" for Bornholm that has just that right "gut feeling" in a series of workshops³⁴.

³³ Interview with representative from Bornholm Regionskommune, August 22, 2007.

³⁴ Bornholms Vækstforum (2007). "Det sker på Bornholm" Nyheder fra Bornholms Vækstforum, September 2007.

Destination Bornholm

Destination Bornholm is the regional tourism organisation whose job it is to market Bornholm. As a public-private partnership it is broadly anchored in Bornholm business life. Part of the national effort “Destination.dk”, Destination Bornholm has as its goal to develop healthy and sustainable tourist enterprises with the possibility to create more employment opportunities, all while working to satisfy the needs and wants of the customers³⁵. As the regional tourism organisation, its job is also to market Bornholm as well as develop various projects. However currently national funding for developing projects has been reduced. The Centre for Regional and Tourism Research (CRT) works with Destination Bornholm in developing common projects and helps to collect and communicate knowledge³⁶.

Individuals as Small Scale Entrepreneurs

In addition to the institutional actors above, a number of individuals were mentioned as significant actors for boosting the innovative capacity on the island. These individuals were mainly small scale entrepreneurs within artistic fields and in the tourism industry who were cited as being unafraid to stick out in the crowd by succeeding and in innovative areas. One interviewee related these types of individuals to Richard Florida’s “creative class”³⁷ of those workers in knowledge industries, artisans and those in non-traditional creative jobs which comprise a new economic force in society. However on Bornholm the geography of these small scale entrepreneurs was quite centred on the more important tourism and experience economy areas such as the villages of Svaneke or Gudhjem.

These individuals were picked out intuitively as significant actors due to their ability to deal with and capitalise economically on socioeconomic change.

4.2 Institutional Preconditions for Innovative and Economic Capacity

Returning to the framework of analysis for analysing institutional capacity (or for our purposes, innovative capacity for regional development), the three main components as delineated by de Magalhaes C., Healy P., Madanipour A., (2002) are:

- **Knowledge resources** including the frames of reference, political and power contexts, openness and learning capacity

³⁵ Destination Bornholm web page: www.destinationen.dk/s3/destination/693we.aspx. Accessed on 8 February 2008.

³⁶ Interview with CRT researcher on 23 August 2007 in Nexø.

³⁷ Florida, Richard (2002) *The Rise of the Creative Class and How It’s Transforming Work, Leisure, Community and Everyday Life*, Basic Books.

- **Relational resources** including the networks and cooperation schemes among stakeholders, and development of social networks leading to the creation of social capital.
- **Mobilization capacity** to act towards achieving a specific goal as often stimulated by “skilled change agents”³⁸

This report thus analyses the elements of both economic and innovative capacity according to this simple framework, not in order to contribute to rigorous theory building, but as a feasible framework by which to analyse the various the descriptive and empirical constructs contributing to innovative capacity, economic capacity and in the end, a core competency.

Today there are several preconditions and institutional factors that set the context for the methods in which Bornholm can create and maintain innovative capacity. These contexts are both national level and local level preconditions.

The Lisbon Agenda: Innovation and Knowledge for Growth and Jobs

At the national level, Denmark is pursuing a very aggressive innovation and entrepreneurship policy in light of the European Union’s renewed Lisbon Agenda. In the year 2000, the European Union adopted the Lisbon strategy³⁹ with a view to creating a competitive knowledge economy that aimed to build sustainable economic growth with more employment, greater social cohesion and respect for the environment. The main idea of the strategy was that knowledge and innovation are the major resources open to the Member States, enterprises and people in their attempts to sustain the European competitiveness and welfare model. During a mid-term review of the Lisbon agenda it was found that the Lisbon process lacked an adaptation strategy at the Member State level and that there was a need for national action plans to implement more effective policy in achieving Lisbon strategy objectives. Thus each country has been required to draft and submit a National Reform Programme, defining and outlining how the Lisbon goals for growth and employment will be carried out.

The Lisbon strategy for jobs and growth is also central to the new EU Cohesion Policy agenda for 2007-2013. In the case of Denmark this is translated into the a regional

³⁸ De Magalhaes C., Healy P., Madanipour A. (2002). *Assessing Institutional Capacity for City Centre Regeneration: Newcastle’s Grainger Town*. Urban Governance, Institutional Capacity and Social Milieux, Ashgate Publishing Ltd, England.

³⁹ Presidency Conclusions of the Lisbon European Council, 23-24 March 2000, Council documents Nr. 100/1/00.

development fund programme entitled “Innovation and Knowledge”⁴⁰ where there is an extremely strong focus on 1) Innovation, knowledge sharing and knowledge building, 2) Establishment and development of new enterprises 3) Use of new technology and ICT and 4) Development of Human resources (in collaboration with the Social Fund). A specific territorial focus is also on the outermost and peripheral regions of Denmark. Bornholm is quite reliant on its possibilities to receive structural fund support from the EU, based on national allocations. Thus the top-down focus (from the EU to the Danish Governmental level to Bornholm) on innovation and knowledge sets an important framework for Bornholm to pursue these goals. Although the diminished scope of Structural Fund support that Denmark is receiving during the 2007-2013 period makes it difficult to pin too many hopes on projects receiving this type of funding.

Regional and Local Preconditions for Innovative Efforts on Bornholm

With the regional reform in Denmark, a very rapid process concluded and implemented on 1 January 2005, the main justification for reform was effectiveness and quality of the healthcare system and simplification of the citizen’s entrance into the public sector. The new regions also gained responsibility for regional development, even though they lost the right of regional taxation. Regional policy is primarily funded (75%) through state block grants. The most important development tasks of the regional council will involve preparation of regional development plans and establishment of regional growth forums, whose responsibilities include:

- Business development strategy
- Monitoring of growth conditions – implementing new regional instruments
- Development activities, i.e innovation, knowledge distribution, new technologies, entrepreneurship, human resources, tourism, peripheral/rural areas
- Proposing projects for regional council financing

Each of the five new regions in Denmark and Bornholm has created a Growth Forum, in accordance with the Danish National Growth Council. Each Growth Forum has entered into a partnership agreement with the Danish Government. On Bornholm this agreement (“Regional Partnerskabsaftale”⁴¹) sets out a series of national initiatives to be pursued at the regional level in Bornholm in the areas of:

- Education and labour market supply
- Better growth conditions for new and small enterprises on Bornholm
- Facilitation of innovation

⁴⁰ Erhvervs- og Byggestyrelsen (2006) Program for Den Europæiske Regionalfond I Danmark 2007-2013 Regional konkurrenceevne og beskæftigelse “Innovation og Viden”.

⁴¹ Regeringen/Bornholms Vækstforum (2007) Regional Patnerskabsaftale 2007-2009.

- Knowledge transfer and dissemination
- Strengthening the role of our tourism and market of Denmark
- Initiatives for energy
- Rural policy and traffic
- Strengthening of Baltic Sea Region Cooperation

Thus at the national and regional level, innovation, growth and jobs are of the highest priority. The above mentioned contexts, however, only set the framework for pursuing these sometimes elusive goals. The real work is seen in changing attitudes on the ground to actually see innovative actions and experience the increase in economic capacity.

Local politics on Bornholm is characterised by some as agreement in small issues, but no real consensus on the long-term political goals. Creating a majority has thus been difficult and since 2005 the Municipal Council (Kommunalbestyrelse) has been ruled by a coalition of Social Democrats, Conservatives and an independent local “Bornholm Party” which the popular Mayor, Bjarne Kristiansen, represents. In theory, political consensus can provide an enabling environment for innovative measures and reforms, but this doesn’t seem to be the case on Bornholm, where politicians don’t seem to have the same long-term vision for the island. However some say on Bornholm that regional and local development happens *despite* the political system rather than because of it. At the same time politicians don’t have the same day-to-day influence on Bornholm as they do on Åland, for instance. Of the 27 local politicians in power, only the mayor is a paid employee and the main job of the municipality is that of a service provider. Citizen-based initiatives are an important method to place issues on the political agenda on Bornholm. The municipal reform in 2001 was one such instance where citizens drove the process in the initial stages and the political process picked up the reins at a later stage.

Regional development and business development on Bornholm, like elsewhere in Denmark, is encouraged to be driven by partnerships between political, research and development and business interests - the “triple helix”. One of the preconditions for the current political coalition was the instigation of the Enterprise Ambassador, as it was determined that business interests should (even literally!) sit next to the mayor. Thus the perusal of innovative and economic capacity is very focused on the relational aspects between significant actors on the island and their collective ability to turn external threats into opportunities.

As the goal of this report is also to examine how regional “autonomy”, or in the case of Bornholm, a degree of regional “room for manoeuvre”, coincides with economic and innovative capacity building, the analysis in this section also takes up how innovative capacity is created via both top-down and bottom-processes, highlighting the institutions and actors that represent these efforts.

4.3 “The Unique Bornholm”: Top-down Efforts for Innovative Capacity on Bornholm

Creating greater innovative capacity on Bornholm is in some ways characterised by fairly traditional efforts to create growth, using methods in a rather “top-down” fashion and focusing on institutions and actors that receive their impetus from regional and national sources “from above”, although their workings are very much grounded at the local level. The most important of these efforts on Bornholm is the Growth Forum and its work to promote business and industrial development on the island with its specific focus on “cluster” working groups.

Knowledge resources - setting the context for promoting the creativity?

Included in the definition of knowledge resources for institutional capacity is not only the knowledge and skills that individuals have, but also the contexts and frames of reference that enable or constrain the creation of knowledge. Bornholm’s Growth Forum is only possible via the special status of Bornholm in Danish Regional Development. Within this context of “regional development autonomy” the Growth Forum represents a top-down opportunity for increasing the knowledge resources on the island. For example the Growth Forum was an opportunity for Bornholm to create for the first time a coherent strategy in the tourism industry. Previously there had been business plans within this sector, but not plans of a strategic nature⁴².

In general the Growth Forums throughout Denmark have been criticised for being yet another forum for the exercise of traditional political wills and fancies and for creating more bureaucracy than innovation⁴³. Yet the Growth Forum on Bornholm is unique as it is the only Growth Forum in Denmark that can boast a chairperson that is *not* a political figure or former *amt* (county) mayor. Lars Nørby Johansen, Chairman of the Bornholm Growth Forum and also the Danish Growth Council, is an industrial leader with an academic background and a summer house on Bornholm. As a highly respected person on the island he has helped contribute to making the Growth Forum a force to be

⁴² Interview with researcher at Centre for Regional and Tourism Research (CRT). 24 August 2007 Nexø.

⁴³ Mandagmorgen : Nyhedernes Tænketaank (2007). MM27 20 august 2007. ”Mer politik end innovation” Leder.

reckoned with in regional development. The Chairman also sets the context of the nature of the growth forum. If it is to be more than a paper tiger, the contextual atmosphere must be congenial and open. The Bornholm Growth Forum has thus prioritised and pointed out new directions to promote economic capacity via innovative capacity.

The overarching vision of the Growth Forum is presented in its strategy document “The Unique Bornholm: Growth via creativity and quality”, with the following operational goals:

- The declining population trend should be halted and hopefully turned
- The number of active business shall increase
- The rate of real economic growth is to be at least 5% per year
- Unemployment shall be reduced to at the maximum the average national level
- The general educational and competence level shall be increased
- The supply of job opportunities shall increase by 400 per year
- Youth education shall be made a priority
- At least half of all youths shall have further education
- Seasonal work shall be decreased through extension of the tourist and building and construction seasons.

In addressing these challenges and operational goals the Growth Forum is building upon increasing the knowledge resources and learning capacity of the workforce on the island in order to address the mismatch between supply and demand of labour. But it is also hoping to attract innovative newcomers by the unique and special character of Bornholm, including the opportunities that the island offers for a good quality of life.

Bornholm recognises that one of its comparative advantages is in offering its populace, both existing and potential, the opportunity for simplified living. This concept encompasses the idea of a “laid back” island lifestyle and is based on the geographic and economic benefits of the island. Because of the short distances between villages, for instance, parents are never more than a half an hour away from picking up children from school or day care and the chances of being caught in traffic jams is very small. This is a dramatic difference from the life of parents of small children in metropolitan areas. Thus inhabitants have the possibility to free up more time for both children and for creative interests, and hopefully finding an outlet for their entrepreneurial efforts, effectively helping to build both knowledge resources and stimulate innovative capacity.⁴⁴

⁴⁴ Centre for Regional-og Turismforskning (2004). Bornholms udviklingsmuligheder – en SWOT-analyse. December 2004.

Relational resources: Cluster work as networking

The cluster activity is meant to be a forum for significant actors with the same industries, or clusters to realise that they face the same challenges and share the same need for similar competencies. One thing that the cluster work can do is to work together to help attract people to move to the island by simple moves such as helping to find housing for one another's employees or helping to find jobs for spouses in such an informal network⁴⁵.

However, at first networking and building relation resources was not self-evident in the Growth Forum's cluster work. When the cluster work began in the summer of 2006 (see section above on significant actors) many of the business directors involved had not even spoken to one another before. They actually needed to be told that they were to sit together!⁴⁶ However now one of the very concrete outcomes of the cluster work is that businesses on Bornholm are not only cooperating, but they are also engaged in swapping workers and loaning employees to one another during the various peaks and valleys in their order books. For instance when a company is experiencing a lull in its activity and orders it can "loan" employees to a company that is experiencing a boom⁴⁷. This boosts the learning competencies of employees, helps to ensure them or more full-time, rather than seasonal, work, and increases productivity of the companies.

Mobilisation capacity: Mobilisation through Identity?

It is not only cooperation within the clusters that is expected, but also cross-cluster efforts within the growth drivers of human resources, innovation, use of technology and entrepreneurship. Other actors in addition to the existing clusters are encouraged to participate actively in business development and perhaps even form new clusters. The Growth Forum is a way to mobilise this capacity.

The work of the Enterprise Ambassador (*Erhvervsambasador*) also represents an important mobilisation function on Bornholm with its identity-seeking and branding strategy. Building and encouraging the "birth" of an identity is a form of stakeholder mobilisation, involving citizens, politicians, administrators, industry and other institutional actors. While it could be said that it is impossible to build an identity from the "top-down", the newly decided "branding" strategy on Bornholm is attempting to do this in a way that is accepted by all parties. In a sense "branding" Bornholm could be better than finding its identity, since there are so many identities on the island and they are sometimes conflicting. Thus far several slogans or images for Bornholm permeate Bornholm, some old such as the "Pearl of the Baltic Sea" or "Denmark's Best Kept

⁴⁵ Interview with Industrial leader on Bornholm, 22 August 2007.

⁴⁶ Interview at Bornholm Regionskommune 23 August 2007.

⁴⁷ Interview at Bornholm Regionskommune 23 August 2007.

Secret” and others new, such as “Bornholm- Open Year Round”, “It happens on Bornholm” , “The Unique Bornholm” or even something like “Bornholm- the creative alternative”.

4.4 Local Action Groups: Bottom-up Efforts towards Innovative Capacity on Bornholm

Even though the work of the Growth Forum and the Enterprise Ambassador is conducted through established political channels it is important for these actors that the institutions are grounded in public opinion. Thus these efforts are classified as top-down since they are pursued within existing and stable regional development forums. The risk however, is that ordinary citizens often know little about what the Growth Forum and the cluster groups are actually achieving.

On the other end of the spectrum are more bottom-up efforts to move Bornholm towards innovative capacity, such as those exemplified by LAG (Local Action Group) among other Non-governmental Organisations (NGOs). Bottom-up measures are also institutionalised to some degree through political channels such as the EU structural funds and the LEADER+ network, but the impetus for innovative generally comes from non-political significant actors producing knowledge and relational resources leading to mobilisation of innovative capacity.

Knowledge resources: Freeing up local competencies

LAG-Bornholm is organised as an association open to all members, both public and private willing to contribute positively to development within three main areas for increasing knowledge and capacity – or “lighthouses” as the 2001-2006 LEADER+ and LAG initiative was called. These “lighthouses”, which are also representative of the 2007-2013 period are: 1) Development of digital media to facilitate local arts and crafts enterprises, and instigating a competence centre for the use of IT in this area, 2) “Måltidets Hus-Bornholm” an initiative to focus on the development of small food producers or agro-industrial companies and help to give them a clear identity and regional profile and focus on quality “from the earth to the dinner table”, and 3) The House of Business or the establishment of small business networks (incubators) and for the physical enabling of new working places⁴⁸. It is in these fields that there appears to be some untapped local competence⁴⁹.

Within LAG, the goal as an organisation is to help develop Bornholm’s development

⁴⁸ Bornholm Regionskommune (2006) Den bornholmske landdistriktspolitik. Vedtaget den 23. November 2006 af Kommunalbestyrelsen for Bornholms Regionskommune

⁴⁹ Interview at Bornholm Regionskommune 23 August 2007.

strategy and facilitate bottom-up growth. An important point of departure is this respect is that Bornholmere *have* the necessary competencies and resources for development; they simply need a push to coordinate and free-up this capacity. For instance, it has been said that farmers have been innovative for ages, in the sense that they must constantly adapt to changing environmental circumstances and economic markets. This also characterises the situation of many small farmers on Bornholm. However what Bornholm farmers lack are channels for greater collaborative efforts where they can cooperate.

Relational resources – creating networks for small businesses

Working together as a “cluster” since the 1800s in Denmark and Bornholm, the agricultural sector has developed good working relations regionally, nationally and locally. This also characterises the Growth Forum’s established Agricultural “cluster” on Bornholm, despite the fact that the cluster is only composed of a few persons.⁵⁰ Yet agriculture and the agro-industrial sector (including agriculture, processing, production of specialty foodstuffs and marketing etc.) remain in need of additional resources and forums for cooperation. When CRT performed a study of the food companies on Bornholm they asked the food producers themselves what they wanted and needed in order to be viable. As it turned out, what food producers most felt that they needed were 1) help to market their products outside of Bornholm, 2) a common showroom for products and 3) a local “Food Ambassador” to help promote products and find markets⁵¹. In achieving this, the role of LAG is to take the existing human competence on the island and build relational networks to help achieve the wishes and goals small businesses.

Thus far some of the ideas for boosting innovative capacity within Bornholm’s small businesses centre on various types of “branding” or identity for Bornholm products, as there is thought to be a need for an original approach to marketing regional specialities. One idea that is emerging is to engage in “storytelling” about products in line with such trends as “New Scandinavian Cooking”. In this respect, local networks such as the “Taste of Denmark” are appealing to national level actors to support small food producers.

However in terms of networking, one of the biggest challenges on Bornholm is getting people to work cross-sectorally and see the potential added-value in cooperation between sectors such as the agriculture, food producers, the experience economy and tourism. Many of the interviewees questioned during the study visit to Bornholm commented that the cross-sectoral element is vital in innovative cooperation, but that

⁵⁰ Interview with representative from Bornholm Regionskommune, 23 August 2007.

⁵¹ Interview at Bornholm Regionskommune 23 August 2007

this still needs to be realised to a greater extent on the island.

Mobilisation capacity – facilitating innovative capacity

Interview subjects were also quite adamant that *Bornholmere* have the potential for economic and especially innovative capacity – they just need help to coordinate and transfer the inherent capacity to other areas. Mobilisation facilitators, such as the LAG leadership, are working to fulfil this need. Local competency is crucial for employment, growth and innovation in a broad sense, but strong agents of change are still desired to anchor the unique competencies of the local population. In particular, a facilitator or “mobilisor” can work to create development that is based on creativity and innovation.

There are several examples of such mobilisation for innovative capacity within the agro-industrial sector on Bornholm, especially those that use and process local raw materials and specialise in few products with very high quality, rather than bulk, low-price products. Success stories include production and selling of such regional and local specialities as chicken, rye biscuits, blue cheese and rape seed oil. Competency is crucial for boosting employment, growth and innovation in a broad sense. Local knowledge is seen as an important component of competency.

4.5 Tourism and the Experience Economy: The Roots of a New Core Competency?

Recalling the earlier definitions of core competency as the capacity to mobilise critical resources over time and utilise them particularly in times of crises, we find the core capacity works as the “root system” that nourishes the trunk (innovative capacity), which in turn supports the branches and foliage (economic capacity). This study puts forth the hypothesis that on Bornholm there has never been just one core competency, as characterises the situation on Åland and the Faroe Islands. Rather the traditional core competency has been a divided between the fishing industries and agriculture. While this divided competency has served Bornholm well in the recent past, the hollowing out in each of the industries (and particularly in fishing) has meant that economic capacity is having a hard time flowering in various branches.

Nourishing the branches and the trunk is the concept of a core competency. But is core competency something that can be *created* or *changed*? When interviewees on Bornholm were asked to define intuitively what they felt innovative capacity was and how it related to Bornholm, nearly all stated that innovative capacity was the ability to deal proactively with change. Perhaps it is then innovative capacity which has the possibility to substantiate a change in core competency.

Or conversely, perhaps a core competency is something deeper than shared knowledge of a traditional trade. It could rather be inherited preconditions for utilising changing contextual knowledge circumstances and relational resources to mobilise development in any type of endeavour. Could it then be possible for Bornholm to re-invent a core competency, using the skills and patterns of traditional work within the fishing industry and agriculture, and feeding upon the still viable important satellite industries of these branches but directed towards a “new” cross-sectoral industry such as the experience economy and tourism?

4.6 Structure of the Tourism Industry

Tourism is an important source of income and employment on Bornholm today. Most of the tourism-related enterprises are small and medium-sized enterprises (SMEs) and there are also many mirco-enterprises (one or a few people employed). Tourism as a branch or industry is difficult to distinguish in statistics as seen in a broad sense it is not only the hotel and restaurant branch that is active in tourism activities, but also artisans, local specialty food producers, destinations etc that are dependent upon and contribute to the flow of tourists on Bornholm.

Bornholm is the region in Denmark with the greatest number of employment opportunities originating from tourism. Thus tourism creates great value for Bornholm, although not to the extent as do other knowledge industries. Yet increased turnover in tourism on Bornholm has the relative possibility to create more jobs than other branches, particularly considering the relatively low level of education on the island. Since 2000, slightly more than 1000 persons have been employed in just the hotel and restaurant branch on Bornholm, although many of these are seasonal and/or part-time workers⁵².

In terms of markets, most important for Bornholm is the domestic Danish market, which accounts for over 50% of the overnight stays on Bornholm. The next most important market for Bornholm tourism is Germany, with the Sweden and Poland following closely. The latter group is becoming an ever increasingly important market as the standard of living in Poland converges with the rest of Europe. Thus the tourism market appears to follow the axiom that nearness matters, particularly on an island for the main form of transport to and from the island continues to be ferry service (although air service is also becoming increasingly important). Physical accessibility is thus a major

⁵² Feldthus Andersen, Lene et al (2006) Strategisk analyse - Beskrivelse af interne og eksterne forhold i Bornholms turisme i dag. Center for Regional - og Turismeforskning juli 2006 som led i projektet "Bornholm I/S - en turismestrategi for Bornholm"

factor for tourism on Bornholm. A witness to this was the positive effect on tourism that Bornholm experienced with the opening of the Oresund's Bridge between Malmö and Copenhagen in 2000.

Table 1 shows the number of weekly ferry services to and from the two main ports on Bornholm, Rønne and Nexø. A large number of Copenhagen residents travel across the Öresunds Bridge and through Sweden to Ystad and then catch the ferry to Bornholm, which accounts for the large number of connections on this route. In Table 2, we also see that the number of passengers travelling to Bornholm by air has almost doubled since 2003. In fact, in terms of domestic travellers, the Rønne airport is the fifth busiest airport in Denmark; only Kastrup, Billund, Aalborg and Aarhus transport a greater number of passengers than the airport on Bornholm⁵³.

Table 1: Ferry connections to and from Bornholm

BORNHOLM FERRY CONNECTIONS AND WEEKLY SERVICES

	From	To		Number of weekly ferry services to/from destination 2007
DK	Ronne	Ystad	Sweden	56
DK	Ronne	Copenhaguen	Denmark	4
DK	Ronne	Koge	Denmark	14
DK	Ronne	Sassnitz	Germany	10
DK	Ronne	Swinoujscie	Poland	1
DK	Ronne	all	all	85
DK	Nexö	Darlowo	Poland	2
DK	Nexö	all	all	4

Sorce: Ferrylines (2007):
<http://www.ferrylines.com/>

⁵³ Accessibility data, calculations and figures come from the ongoing Nordregio project "East-West Window".

Table 2: Rønne Airport total number of passengers 2003-2006
RONNE BORNHOLM AIRPORT - Total transport of passengers
Total passengers on board

		2003	2004	2005	2006
TOTAL	RONNE airport	123487	117976	159311	220600
NATIONAL	RONNE airport	122880	117615	155102	217544
INTERNATIONAL	RONNE airport	607	361	4209	3056
Intl. Intra EU	RONNE airport	73	360	599	644
Intl. Extra EU	RONNE airport	534	1	3610	2412

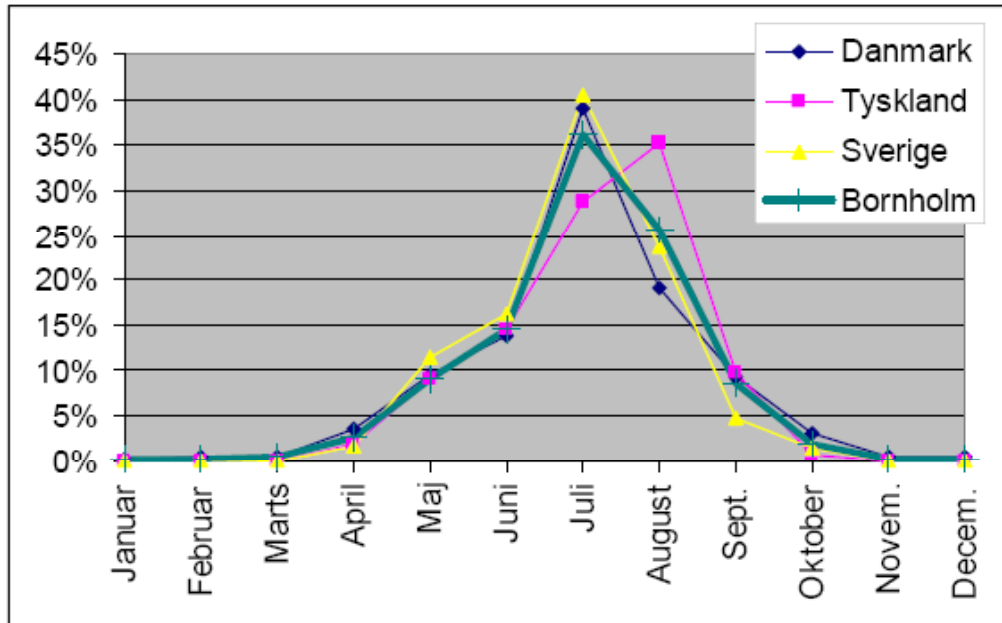
Source: Eurostat (2007)

In general, other trends of characterising Bornholm's tourist industry are tourist stays that are more frequent, but shorter in duration and the increasing age of tourists. Visitors to Bornholm tend to be older (50+) and overnight stays are in hotels and summer houses, as well as camp grounds.

The tourism industry on Bornholm is extremely seasonal, as shown in Figure 8 with vital peaks for Danish and Swedish visitors in July and a peak in August for German visitors. During the winter months, tourism is practically non-existent. This is one of the main contributing factors to the difficulty of efforts to make tourism into one of the core competencies on Bornholm. Working seasonal jobs has become a lifestyle on Bornholm with many (but far from all) employees content to work long hours during the tourist season and collect unemployment benefits when layoffs occur during the off-season. This also makes human development within the industry difficult. Perhaps this is one of the reasons why tourism has previously not been seen as a "real" industry on Bornholm. Yet now that the Growth Forum has recognised it as such it is slowly being respected as a significant and professional industry⁵⁴.

⁵⁴ Interview with CRT Researcher in Nexø, 24 August 2007.

Figure 8: Seasonal distribution of overnight stays on Bornholm- primary markets and in total, 2004.



Source: Feldthus Andersen, Lene et al (2006) Strategisk analyse - Beskrivelse af interne og eksterne forhold i Bornholms turisme i dag. Baseret på indberetninger til Danmarks Statistik.

4.7 Developing a Common Tourism Strategy

While the tourism sector has long been an important driver of economic capacity on Bornholm, it has only been in the last few years that Bornholm has begun to develop a common strategy for tourism within the Tourism cluster of the Growth Forum. This was initiated by the development of a common tourism strategy and has resulted in a common mission, strategy and plan of action⁵⁵. This marked the first time that a common strategy and common point of departure has been agreed to within tourism development. As such, the strategy is seen as a tool for both public and private actors involved in the tourism sector on Bornholm.

The concept of the strategy is that the tourism “product” (the totality of goods, and services) should meet all the needs of the traveller while they are on Bornholm and that guests (travelling both for pleasure and business) experience Bornholm as a *coherent space of authentic experiences* that build on the strengths of the nature, landscape, gastronomy experiences, culture, art and the special atmosphere of Bornholm⁵⁶. This strategy builds upon three main cornerstones:

⁵⁵ Vækstforum (2007) Bornholm I/S En Turismestrategi.

⁵⁶ Ibid, p. 8

- **Visibility:** including branding, marketing and creating an image of Bornholm to live up to
- **Accessibility:** including physical infrastructure and virtual/digital capacity as well as ensuing “Value for Money”
- **Experience values:** including understanding and meeting guests’ needs and the different types of experiences possible on Bornholm

4.8 Building on Core Competency to Facilitate Innovative Capacity within the Tourism and Experience Economy Sectors

Bornholm appears to be in the process of creating innovative capacity in the tourism and experience economy sectors by building up a “root system” of core competencies, some of which are transferable from the heritage of core competencies of the fishing and agricultural industries or based upon “satellite” industries, but in a newer guise. Both bottom-up and top-down initiatives that utilise the core competencies on the island to create innovative capacity within the tourism and experience economy branches have been welcomed, although not always with open arms. Yet the following will detail efforts to do just this. In a report from CRT on the internal and external conditions for tourism on Bornholm today (and which was used in the tourism strategy document), the question is raised if Bornholm tourism can be developed through the core competencies, which make it possible to utilise opportunities for future development. These competencies included: Cooperation and alliances, networks, Information and Communication Technology, branding, the opportunities provided by the natural environment, and the number of Creative people on the island⁵⁷.

On the other hand, the adversities on Bornholm to developing a core competency in tourism include; the fact that until recently there was no collective tourism strategy, the need for more effective marketing strategies, the outdated facilities for overnight stays, the low level of education in the tourism sector, and the need for increased accessibility⁵⁸. The following sections examine many of these pros and cons to building innovative capacity and core competency in the tourism area, in terms of the familiar framework of knowledge resources, relational resources and mobilisation capacity.

⁵⁷ Feldthus Andersen, Lene et al (2006) Strategisk analyse - Beskrivelse af interne og eksterne forhold i Bornholms turisme i dag. Center for Regional - og Turismeforskning juli 2006 som led i projektet "Bornholm I/S - en turismestrategi for Bornholm".

⁵⁸ Ibid.

Tourism Knowledge Resources: Human resources, education and creativity to create innovative capacity

Within the Growth Forum and the tourism cluster it is acknowledged that the level of education for employees in the tourism sector should be strengthened. In 1994 at almost two-thirds of the workforce in the hotel and restaurant industry did not have a higher education level than comprehensive school (*grundskole*), but this figure fell to slightly over 50% in 2004. In the same period (1994-2004) the number of employees with a technical education increased from 20% to 30%⁵⁹. An “educational mismatch” seems to exist among the qualified and non-qualified job opportunities on Bornholm.

On the other hand, formal education obviously does not always equate with knowledge or competency. The report on the internal and external conditions for tourism on Bornholm also states that one of the main tourism competencies on Bornholm is the high number of creative people and enterprises on the island. This report also quotes a study on the mapping of the creative classes in Denmark, which alleges that Bornholm attracts a high number of creative people and enterprises in areas such music, film, photography, arts and crafts and specialty food products⁶⁰. Artists have always been attracted to the light, the water and the quietness on Bornholm and perhaps it is these qualities, combined with the lower cost of living and high quality of life that enables creative people and industries to take risks in order to flourish?

Many of these people engaged in such industries on Bornholm have the requisite knowledge, ideas and initiatives to form the knowledge dimension of innovative capacity. Several interviewees mentioned individuals on the island that embodied this innovative capacity in that they had the ability to adapt their activities to prevailing trends and proactively deal with the external threats to the island. Most of them were active in fields related to tourism and in fulfilling the needs and desires of tourists and locals alike, such as those in certain hotel industries that varied the use of their facilities in the off-season, or artisans that seemed intuitively to understand the types of experiences and products that tourists and Bornholmere appreciated. By realising the potential of Bornholm they help to change the way Bornholmere think about the island and help provide Bornholm with a positive image⁶¹.

The creative people are spread throughout the island, but have tended to congregate in the more tourist-oriented towns such as Svaneke, while towns such as Hasle have a very different type of population structure. Many of the creative people have moved to

⁵⁹ Ibid, p. 15-16.

⁶⁰ The geography of the Danish Creative Class(2005) A Mapping and Analysis. Handelshøjskolen, København. October 2005.

⁶¹ Interview with CRT researcher in Nexø, 24 August 2007.

Bornholm from the “outside” and thus long-term residents tend to be a bit sceptical of their initiatives and successes. This has encouraged something of a dichotomy with traditional-thinking people wanting to keep Bornholm as “Denmark’s best kept secret”, but at the same time being proud of the new possibilities for the island. Thus within the tourism-related industries there are great opportunities for creativity and innovation if the local and regional context is right.

Relational Resources: More cooperation and less competition in tourism!

While it is largely acknowledged that there is sufficient knowledge and creativity in the tourism-related enterprises on Bornholm, despite the lack of formal education in the branch, the problem remains how to increase the relational activities between enterprises. This is not to say that there are not networks and common platforms for tourism on Bornholm. The tourism entities on the island in fact engage in 40% more of these types of activities than do other tourist areas of Denmark⁶². However this type of network has not always lead to new business opportunities or growth in the industry. The prevailing relationships in the tourism sector seem to be more based on competition rather than cooperation. Thus there is a great need for cooperation, especially regarding innovation. Older formalised constellations need to give way to more informal networks⁶³.

Not only is cooperation and networking a prerequisite for increasing the viability of the tourism and tourism-related industries; there also must be agreement as to what the primary goals are for tourism. The tourism product on Bornholm is diversified; from cultural immersion to nature experiences and from regional gastronomy to fishing and sunbathing. While most significant actors, even construction entrepreneurs, are quite sure that it is important to retain the integrity and carrying capacity of the island, rather than turning it into another Costa del Sol, it is difficult to focus the vision of what Bornholm wants to achieve with increased tourism and the experience economy, much less the means to accomplish it. This is why the work of the Growth Forum Tourism Cluster, Destination Bornholm and the tourism strategy is so important. Regional “autonomy” and the possibility to have a Growth Forum on Bornholm have provided the context for organising common visions and goals in the tourism industry as never before. The first step in increased cooperation is agreeing upon common goals and strategies to meet these goals.

⁶² Feldthus Andersen, Lene et al (2006) Strategisk analyse - Beskrivelse af interne og eksterne forhold i Bornholms turisme i dag. Center for Regional - og Turismeforskning juli 2006 som led i projektet "Bornholm I/S - en turismestrategi for Bornholm".

⁶³ Interview with CRT Researcher in Nexø, 24 August 2007.

Mobilisation capacity: Cooperation among actors and realisation of innovative capacity

Several possibilities exist on Bornholm for increasing the knowledge resources and creativity opportunities for small business. Bornholm's tourism even has what could be called its own R&D division in the work of Destination Bornholm and the Centre for Regional and Tourism Research (CRT)⁶⁴. These actors thus play the role of “agents of change” in creating mobilisation capacity. CRT in particular has helped to both create and disseminate knowledge resources and to provide forums for stakeholder relations within the tourism industry.

Destination Bornholm has also instigated projects designed to integrate various aspects of the tourism industry, for instance, “dynamic packaging”, a system that requires much collaboration between actors to build up various tourism packages including several elements, such as cottage rental combined with entrance to various cultural activities and cooperation with restaurants, cafes etc. This would also be aided by a common tourism IT platform, but this was never realised since the idea fell through when the main partner left the project.

Other ideas to help expand the tourist industry have come from the National Tourism Board, but tourism innovation seems to work better in a bottom-up manner on Bornholm. The bottom-up approach to tourism innovation presumably helps build consensus among local actors and a culture of cooperation, as opposed to than top-down steering, even if the cooperation is about seemingly small things, such as agreeing upon the opening times of restaurants, etc. New tourism partnerships on Bornholm are only now just being established and thus it is a bit early to see what their relationship will be with the old, fixed constellations. The impetus of greater mobilisation between knowledge resources and relational resources is still missing to some degree. As one interviewee stated “there is huge potential in the tourism industry, but little confidence”. Perhaps by being confident enough to face the dichotomies present on Bornholm and agreeing on common goals it may be possible to mobilise greater innovation and economic capacity on Bornholm. But could tourism be a new core capacity? Perhaps not. At least not until the dichotomies are sufficiently addressed.

⁶⁴ Vækstforum (2007) Bornholm I/S En Turismestrategi.

5. Economic and innovative capacity - Dealing with dichotomies on Bornholm?

5.1 Exploring Dichotomies on Bornholm

One of the primary results of the interviews conducted on Bornholm was the propensity with which interviewees alluded to the dichotomies⁶⁵ that abound regarding life and development on Bornholm. The existence of dichotomies is not a negative aspect that needs to be overcome, but dichotomies do need to be addressed otherwise they can be a stumbling block to greater cooperation. One interviewee very succinctly stated: “If we can face our dichotomies we can create development on Bornholm”⁶⁶. Dichotomies are a human condition and the lives of most persons are filled with both small and large contradictions. But on Bornholm the collectiveness of these dichotomies appears to be quite persuasive, at least to the interview subjects.

Perhaps these dichotomies are in some way the heritage of the “split” traditional core competency on Bornholm between fishing and the fishing industries and agriculture – between endeavours at sea and inland. Naturally this is but speculation and would need further ethnographic research to substantiate. Nevertheless, the breaching the modern-day dichotomies on Bornholm could facilitate greater innovative and economic capacity.

The preceding chapter has analysed various elements of innovative capacity on Bornholm in terms of *the knowledge resources*, *relational resources* and *mobilisation capacity* available to the significant actors to deal with external threats. It has found that while the knowledge and human resources on Bornholm are generally sufficient, there is still a lack of relational resources and networks to optimise human resources. This is most apparent in the tourism industry as a budding “core competency”.

On the other hand Bornholm *must* mobilise capacity for regional development, given its rather special regional status and responsibility for its own regional development, even as part of the Region Hovedstaden. Yet while regions in Denmark have gained responsibility for regional development, the economic resources to fulfil this development have not been forthcoming⁶⁷. Thus the ensuing Growth Forums, including

⁶⁵ A simple definition of dichotomies according to the Collins English Dictionary, is “... a division into two parts or classifications, especially when they are sharply distinguished or opposed”

⁶⁶ Interview with representative of Bornholm Regionskommune in Rønne, 22 August 2007.

⁶⁷ Lähteenmäki-Smith, K. och Van Well, L. (2007) En ny roll för regionerna, PLAN, tidskrift för

Bornholm's, provide the political opportunity structure for regional development as a type of "process consultant" and offers an established context in which to strive for innovative and economic capacity. In addition, there are also several bottom-up efforts that complement the top-down measures, as seen in the work of LAG for instance. Mobilisation, however, is difficult due to the dichotomies. This is mirrored and exacerbated as well in the seemingly inability to come to a political consensus regarding the long-term goals and visions of Bornholm.

Societal dichotomies represent dualisms in social, economic and political life for which there seems to be little or no overlap. Thus, overcoming dichotomies is achieved by a process of integrative bargaining or creation of a type of consensual knowledge or goals and means. Some of dichotomies identified in this study on Bornholm are fairly unique to the island while others are more universal to many similar types of societies. There are a number of dichotomies that characterise socioeconomic life on Bornholm and which influence significant actors' economic and innovative capacity, as in Figure 9:

Figure 9: Socioeconomic Dichotomies on Bornholm

The Danish identity	The "autonomous, independent" identity
Insular, provincial identity	Baltic Sea Region/open global identity
Keeping the status quo	Open for change
Economic development	Quality of life
The industrial, older economies (fishing, traditional agriculture)	The new economies such as the experience economy

Perhaps because of these dichotomies it is difficult to see how a new core competency could develop on Bornholm.

5.2 Bornholm's Identity

"Dependent" vs "Independent" towards Denmark

As discussed earlier in the report, due to its unique geographic position, Bornholmere maintain an identity as a part of Denmark but with a strong feeling of independence, mainly due to its distance from the other parts of Denmark. Historical, political, economic and social considerations also fuel the dichotomy.

In earlier chapters two historical events have coloured the Bornholm identity and relationship with Denmark were described: Petitioning to return to Denmark after defeating the Swedes in 1658 and during the Soviet occupation at the end of World War

II when Bornholm felt that the rest of Denmark had “forgot” the island which was still lying behind the Iron Curtain. Both events demonstrate the somewhat complicated nature of the relationship between Bornholm and other parts of Denmark. For instance, two of Bornholm’s modern ferries are named after Bornholm heroes in connection with the Peace of Roskilde, Villum Clausen and Povl Anker.

Politically, Bornholm has some regional “autonomy” in the new regional constellations of Denmark and is allotted two seats in the Danish Parliament figured on a regional basis. The new Growth Forum on Bornholm allows for, and in fact mandates, that regional development becomes a priority for Bornholmers themselves to attend to independently. Yet at the same time Bornholm has also been dependent on regional policy measures such as the “Bornholm Pakken” of 1993 which provided Bornholm with DKK 145 million from the central government for both immediate action and long-term development⁶⁸. Regional policy measures such as this are not ruled out for the future, although there is more hope in the EU Structural Funds, than in national measures for support of the development of the regions.

Economically, the industrial base of Bornholm is less focused on the national level as it is on the local and international levels. “The trade and industry sectors on Bornholm traditionally focus on either the international or the local market. As such we rarely see examples of Bornholm-based businesses that are branches of larger Danish companies. On the other hand there are many examples of Bornholm businesses that have invested in or traded on the international markets⁶⁹”. Traditionally Bornholm has tended to look to other parts of the Baltic rather than the Region Hovedstaden and thus not much effort has been put into developing relations with the region until now.

Socially, the local/international dichotomy, in which Bornholm often tends to “jump over” the national level, can be exemplified by the relational capacity of the Centre for Regional and Tourism Research (CRT). In the beginning of its existence (as one of the “Bornholm Pakken” measures), CRT was like “an island within an island”. While CRT is now anchored as a very significant local actor on Bornholm and enjoys an international reputation as “Bornholm’s window to the world” as part of international networks, especially in networks for peripheral and maritime regions, an evaluation of the institute mentioned that CRT still needs to be better anchored *nationally*⁷⁰. This is an example of the Bornholm dichotomy: actors can at once have a very local and even international role, but the relational ties with the national level are often more difficult to establish.

⁶⁸ Dahlström, M. et al. (2006) How to make a Living in Insular Areas – Six Nordic Cases. Nordregio Report 2006:1. p. 29.

⁶⁹ Ibid p. 25.

⁷⁰ Interview with CRT director in Nexø, 24 August 2007.

Insular vs International identity

Closely related to the dependent vs. independent identity is that dichotomy of Bornholmere as at once an insular, provincial people and as “citizens of the world”. These two identities do not necessarily preclude one another. Some Bornholmere are lucky enough to live with a choice of lifestyle that includes a local anchoring in their village or city and the small town amenities this way of life provides, while at the same time having work which takes them periodically to far-flung places of the earth. Indeed this can be the best of both worlds!

Bornholm's Regionskommune has been a very significant actor in international European projects, such as the Euroregion Baltic and the EU-financed INTERREG IIIB project “Seagull” and “Seagull II”. These endeavours place Bornholm in the centre of activities happening in the Baltic Sea Region and many international efforts give impetus to regional planning measures, such as setting up new networks and increasing capabilities as well as developing a Joint Development Perspective for the Baltic Sea Region. Bornholm is now included in a new INTERREG IVA area for cross-border cooperation, the South Baltic Sea cooperation zone and this should lead to further international cooperation possibilities. Membership in the B7 Baltic Islands Network (including in addition to Bornholm, the islands of Gotland, Hiiumaa, Rügen, Saaremaa, Öland and Åland) is another example of the outward reach that Bornholm exhibits, as is the Project Baltic Educational Island, featuring Bornholm as a centre for education for other regions in the Baltic Sea countries. Only a relatively small group of people on Bornholm, however, participate in these international networks and meetings. This international outreach does not normally affect the daily lives of Bornholmere.

5.3 Dealing with Change on Bornholm

Another dichotomy on Bornholm is seen in the manner that the significant actors deal with external threats to the island. Structural threats such as the waning or collapse of industries like the fishing industry give rise to the need to deal with change. Attitudes towards change differ on Bornholm as they do in all societies.

Traditionalists vs. Innovators

Attitudes towards change differ on Bornholm as they do in all societies, where both “traditionalists” and “innovators” can be found. Traditionalists tend to think in terms of addressing change by using familiar tools and opportunities that have been used in the past, including top-down measures such as national transfers and crisis packages. This way of thinking is not necessarily bad, but it does leave out a whole range of other possibilities, that innovators are more likely to consider. For instance, traditionalists

rightly express concern about the low level of education possessed by the labour force on the island and the need for more qualified. Innovators also see this as a problem, but understand it as one that can be overcome by both traditional and technical competence building, but also by being open to the potential that local, untapped knowledge can provide. As one interviewee said, “innovative capacity is a mindset; it is the willingness to embrace change and the capacity to adapt to it”⁷¹.

Thus there is also a growing segment of people on Bornholm who are beginning to understand the importance of innovative thinking in helping to realise the potential of Bornholm. For better or worse, this group of people also tends to be those that have moved to the island. This is a prevailing theme throughout the interviews conducted on Bornholm. It also echoes themes made in previous studies based on “life stories” on Bornholm, which described one such “story”:

“The born locals are marked by the old primary sector economy and are generally more stagnant and passive when it comes to taking initiatives. It is people coming from the outside that take the initiatives, represent the new development and introduce new types of activities – they are the ones that change things and change the small communities where they live”⁷².

However it takes time for institutions to come up to pace with processes of change and how Bornholmers think about their island, especially considering the inherited dependency on primary business and its derived and supplier industries⁷³. For instance there seems to still be a disproportionate media attention on the fishing and traditional agricultural industries⁷⁴. These are the sectors that are more vulnerable to the external threat of globalisation, outsourcing and diminishing population dynamics. To quote an interviewee: “Winning the globalisation challenge in the business environment demands new, innovative ways of thinking to create economic growth”⁷⁵.

Economic Development vs. Quality of Life

In Denmark, regional economic growth and business development is pursued in connection with the European Union goals of regional competitiveness and employment and with a particular emphasis on innovation and entrepreneurship. Bornholm’s Growth Forum has translated these national goals to the specific conditions on Bornholm. At the same time Bornholm’s Growth Forum places a heavy emphasis on an OECD study

⁷¹ Interview with CRT Researcher in Nexø, 24 August 2007.

⁷² Dahlström, M. et al. (2006) How to make a Living in Insular Areas – Six Nordic Cases. Nordregio Report 2006:1. p. 32.

⁷³ Ibid. p. 26.

⁷⁴ Interview with CRT Researcher in Nexø, 24 August 2007

⁷⁵ Interview with Jensen Flatware Director in Rønne, 22 August 2007.

which purports that 70% of all growth in a society can be explained from four various growth sources: Human resources, innovation, use of new technology/information and communication technology, and entrepreneurship⁷⁶ as bases its business development strategy in this manner. On the other hand, Danish national goals for sustainable development include the aim that “the welfare society must be developed and economic growth must be decoupled from environmental impacts⁷⁷”.

There thus can be a dichotomy between the goals of achieving *development* and a sustainable *quality of life*. This dichotomy is played out around the globe and Bornholm is not immune to the duality of concurrently seeking economic growth and pursuing development that is not based solely on growing the economy. As is perhaps not unusual for an island-community, many Bornholmers show little interest in the traditional growing of the economy and the subsequent land exploitation and construction that often characterises local attempts towards growth. This is at once seen as a problem and as a possibility. As the Growth Forum’s business strategy relates, one of the goals is to market Bornholm as a good place to move to, to start up a business, to visit or to hold a conference. An important part of this marketing image is the special quality of life that can be had on Bornholm, the slower pace of life, the many non-exploited beaches and the preserved natural and cultural experiences that can be had.

Most are in agreement that Bornholm is not suitable as a mega tourist attraction or as a haven for housing developments on a large scale. It is vitally important to retain the integrity and carrying capacity of the island. There are, however, differences of opinion as to how much growth and development is sustainable. Newcomers to the island want to extol the possibilities available on Bornholm, while old-timers want to keep Bornholm as “Denmark’s best kept secret”⁷⁸.

5.4 Economic and Innovative Capacity: Dichotomies?

Recalling the tree assimilation made in the beginning chapter of this report, economic capacity was differentiated from innovative capacity by likening the former to the flowing and leafing branches of the tree, or the fruit bearing aspects, while *innovative capacity* was conceptualised as the hearty trunk of a tree, intervening matter between *core competency* as the root system and *economic capacity* as the fruits borne from the nourishment of the roots and the stability of the trunk (see figure 10). A long trunk or wooden stem of innovative capacity is not strictly necessary to have economic capacity;

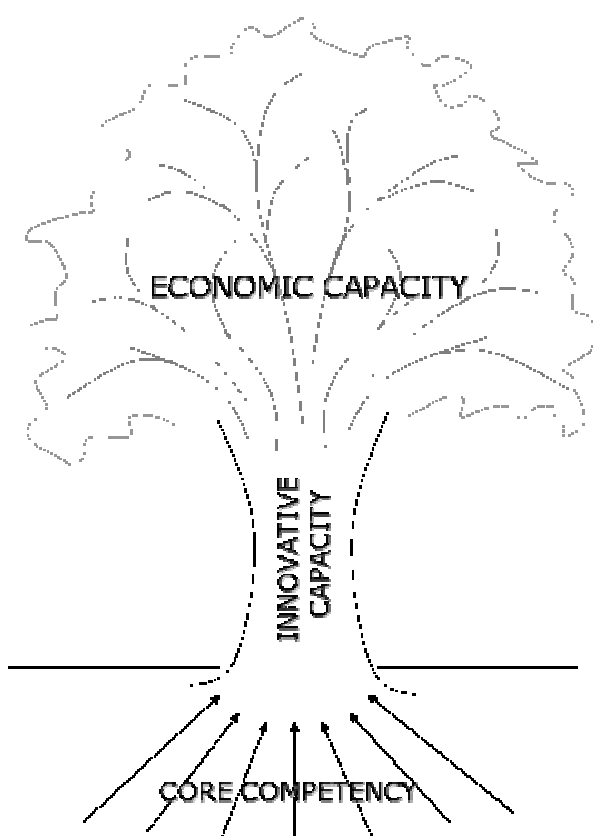
⁷⁶ Bornholms Vækstforum (2007) Erhvervsudviklingsstrategi 2007-2010 “Det unikke Bornholm: Vækst via kreativitet og kvalitet!”. Februari 2007.

⁷⁷ Danish Government (2002) Denmark’s National Strategy for Sustainable Development. A shared future – balanced development, August 2002.

⁷⁸ Interview with CRT researcher in Nexø, 24 August 2007.

economic capacity could be directly nourished through the root system or core competency. But a strong support of innovative capacity could help in bearing economic fruit in the atmosphere of globalisation, particularly in cases where core capacity is weakening.

Figure 10: The Tree: Core competency, innovative capacity and economic capacity



As former director of Greenpeace International eloquently described in an essay pondering the utility of trees:

”I soon discovered that trees are just large plants that have evolved the ability to grow long wooden stems ... they actually had only one purpose in mind and that was to get their needles or leaves higher up above the other plants where the tree could then monopolize the Sun’s energy for photosynthesis Trees are basically plants that want to be in the sun. If trees wanted to be in the shade they would have been shrubs instead, they would not have spent so much time and energy growing long wooden stems”⁷⁹.

⁷⁹ Patrick Moore (2002) “Trees are the answer”. Published at http://www.greenspirit.com/trees_answer.cfm accessed

In this report on Bornholm and the studies on the autonomous regions of the Faroe Islands and Åland, innovative capacity is not conceptualised as replacing economic capacity, but rather giving it a boost to where economies can flourish in the global system and proactively deal with external threats. To reach the sun and flourish in the global economy, innovative capacity is particularly important as it is difficult to see a traditional core competency to bear up economic development. Rather historical competency is split between the fishing and agricultural sectors and is continually being hollowed out. In comparison with the results from the Åland Study and the Faroe Islands study, where very strong core competencies throughout history could be drawn upon to branch out into economic capacity in other similar but diversified areas, Bornholm's dichotomised core competencies are making this process more difficult, although not impossible.

Enterprises and small industries are now being built up around the core competencies and adjacent industries. In the agricultural sector, the focus of new opportunities is within the value-added agricultural product sector and in production and packaging of specialty products and foodstuffs. In the fishing sector, there are increased opportunities for utilising the cultural heritage of fishing on Bornholm in the tourism and other experience economies. Yet these processes seem to be occurring independently from one another, despite the degree of overlap and synergies that could be enjoyed through collaboration. With a greater focus on the relational aspects of innovative capacity there are possibilities for boosting the economic capacity on Bornholm

5.5 Building on the Åland and Faroe Island studies

Bornholm is not autonomous and thus has perhaps not been as reliant on reinforcing and renewing its core competencies as have the autonomous regions where the political space for manoeuvre in economic policy and socio-economic development is much, much broader, such as on Åland, Greenland or the Faroe Islands. On the other hand, the development responsibility the Bornholm retains within the new regional reform process provides an important impetus for working towards increasing economic capacity on the island, particularly through innovative capacity building.

However there are several similarities and differences between the conclusions that can be drawn from particularly the Faroe Islands study and this study of Bornholm. Similar to the Faroe Islands, Bornholm's strive for economic and innovative capacity can be traced to a specific crisis reference point in the economic recession culminating in the late 1980s and early 1990s and the collapse of the fishing industry. However in the case

of the Faroe Islands, the mobilisation in the aftermath of the crisis was driven by the goal of greater economic and political independence from Denmark and a new strategy for increased responsibility and independence. Learning processes were important in the Faroe Islands in order to remain economically viable. On Bornholm the economic crisis of the 1970s necessitated special measures from the Danish government in the form of the Bornholm Package and any “learning” that occurred, has been only a recent phenomenon.

On Åland there is a very strong maritime core competency that has been utilised historically for related diversification and proactive business development⁸⁰. In the case of the Faroe Islands, the core competency is within the fishery industries. On Bornholm, both the fishery industries and agriculture make up a core competency. Both the Faroe Islands and Bornholm have good possibilities for building up an innovative capacity to bear up the economic capacity of the regions. In both regions the chance to succeed is seen as greater when innovative capacity is not pulled out of thin air, but rather builds upon a strong heritage, identity or even “brand” to mobilise entrepreneurship⁸¹.

5.6 Recommendations for Bornholm

The main recommendation that can be given to Bornholm with regard to its regional development is that: *Bornholm itself knows best!* In such a small study of the island it would be presumptuous to recommend various courses of action. Nevertheless a few conclusions from this study may be useful to reiterate and justify courses of action already considered or enacted.

Firstly if this study can argue for anything, it is that there is great potential for innovative capacity on Bornholm. In terms of *knowledge resources*, while formal education and training is still in demand and qualified labour is needed, there appears to be a wealth of *untapped potential* on the island. The key is realising *ways to free up this potential*.

Secondly, and perhaps most importantly, Bornholmere in all sectors could profitably *cooperate with one another* to a much greater extent. According to the frame of reference used in this study to conceptualise innovative capacity, the *relational resources are what seem to be most lacking on Bornholm*. This observation has been echoed in both the interviews on Bornholm and within reports and studies performed on

⁸⁰ Karlsson, A. (2007) Det åländska sjöklustret – En studie i den ekonomiska tillväxtens entreprenörella och institutionella förutsättningar. Mariehamn. R 2007:2

⁸¹ Karlsson, A. (2007) Färöarna: En studie av institutionellt handlingsutrymme, ekonomisk utveckling och ekonomisk-politiskt lärande. Rapport 2007:8. ÅSUB. Åland. Page 117-118.

the island. Particularly within the tourism and experience economy industries, including local specialty foods, increased collaboration could be especially fruitful. Various types of relational networking could help to utilise the core competencies in both the traditional fishing and agricultural industries in new ways, although the scale of such efforts must at first be on a very small level.

Finally, boosting knowledge resources and relational resources can be greatly facilitated via strong “*agents of change*” or capacity mobilisers. These can get individuals and institutional actors. In this study of Bornholm these types of *mobilising agents* seem to be found throughout the cluster working groups of the Growth Forum, and within the bottom-up efforts of Local Action Group (LAG). Both top-down and bottom-up methods for facilitating knowledge creation and social networking should be encouraged. The impetus that increased innovative capacity will hopefully feed into regional development and greater economic capacity.

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