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PART II

Chapter 2. Rural restructuring and its socioeconomic manifestations: A case study of Sweden

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Introduction

In the last century traditional rural sectors have experienced a dramatic reduction in employment in several Western countries, and in combination with commuting, changing migration patterns, and ageing it is no understatement to say that life in contemporary rural areas are different than sixty years ago (Amcoff, 2000; Pettersson, 2002; Woods, 2005). An increasing amount of literature has furthermore recognized that these changes are intertwined with each other, forming a complex web of cause and effect. In order to explain the nature of recent rural change, scholars have been compelled to adapt a multidimensional theoretical framework in which rural change is seen as the interrelated consequence of technical, economic and social changes on a global scale; a perspective which has come to be known as the term “rural restructuring” (Ilbery, 1998; Marsden et al., 1990; Woods, 2005). The idea of rural restructuring is to view rural change as a multifaceted and interdependent phenomenon, not limited to only a few aspects of reality; in a sense it takes a holistic view on rural change, where everything is seen as related to everything else, and thus blurs the boundaries between different dimensions (Pettersson, 2002, Page 13). The main advantage of the restructuring approach is thus its multidimensional outlook that, at least in theory, aims at a complete explanation of rural change.

Critique has however been raised against the application of the restructuring perspective. When the term rural restructuring has been used in studies, the number of dimensions are often limited and focus is only given to one or a few dimensions at the expense of others (Hoggart and Paniagua, 2001; Pettersson, 2002, Page 15).
Furthermore, the meaning of rural restructuring varies between different studies and it is often only vaguely defined. The temporal perspective of rural restructuring also varies between studies; in some studies the whole postwar period is considered whereas other studies begins with the economic crisis that affected the western world in the 1970s (Pettersson, 2002, Pages 14-15). It is in the light of this situation that Hoggart and Paniagua (2001, Page 42) argue that rural restructuring as a theoretical approach has been used too flippantly, resulting in a devalued concept:

For us, when seen as a shift in society from one condition to another, restructuring should embody major qualitative, and not just quantitative, change in social structures and practices. Unless we want to trivialise the concept, its use should be restricted to transformations that are both inter-related and multi-dimensional in character; otherwise we have descriptors that are more than adequate, like industrialisation, local government reorganisation, electoral dealignment or growth in consumerism. To clarify, in our view restructuring is not a change in one sector that has multiplier effects on other sectors. Restructuring involves fundamental readjustments in a variety of spheres of life, where processes of change are causally linked.

In this view, changes in migration patterns (or changes in the agricultural sector) should not be seen as rural restructuring when isolated from other dimensions. When all dimensions are considered together, however, forming a complex, interconnected pattern, a stronger case for rural restructuring can be made. Following this line, Woods (2005, Page 41) argues that phenomena such as agricultural change can “be interpreted as the local expression of inter-connected processes of rural restructuring driven by globalization, technological innovation and social modernization.”

The purpose of this paper is to investigate socioeconomic changes in rural Sweden from the restructuring perspective. Sweden will thus be used as a case study in order to examine the workings behind rural restructuring. As a case study, Sweden is chosen since relatively little research has been made on Sweden from a restructuring perspective. The great majority of the restructuring literature is set in the context of Great Britain-- a country with partly dissimilar conditions compared with the sparsely populated countries in the north.
However, in describing the interrelated processes of rural restructuring one is forced to delimit the study to only a few dimensions; otherwise the project would be insurmountably large. Although agreeing with the holistic ontology of the restructuring approach it is necessary to divide the interrelated phenomena of rural change into different categories in order to conduct a comprehensible analysis. In the following the investigation has been divided between the drivers and the local outcomes of rural restructuring. These have been chosen based on their so-deemed relevancy in the literature on rural change, but, admittedly, the choice is subjective and cannot account for the complete picture of the processes of rural restructuring, neither in Sweden nor elsewhere.

The chosen drivers of rural restructuring, from Woods (2005, Pages 29–41), are:

- Globalization
- Technological development
- Social modernization

The outcomes of rural restructuring chosen to be investigated are:

- Economic changes in terms of occupational structure
- Changes in migration patterns

It is important to point out that this selectivity and categorization should only be seen as a necessity caused by the need to think in categories and the need to select an area of interest. Furthermore, although the processes of rural restructuring involves both long term and short term changes, this study’s main focus is on the long-term, and perhaps more fundamental, changes in employment structure and migration patterns which have taken place in rural Sweden.

In admitting that this article only investigates a small, although admittedly central, fraction of all phenomena involved in the restructuring of rural areas in Sweden, the more fundamental points of Hoggart and Paniagua’s (2001) critique are parried away. The investigation of changes in occupational structure and migration patterns is based on aggregated statistics from official Swedish sources and previously published literature. This material will be used for descriptive purposes while the causal link to the drivers of rural restructuring will be assumed. This means that the empirical inquiry of
the report is inductive and should only be seen as a first step in understanding the restructuring of rural Sweden.

In the next section, the three drivers of rural restructuring, as suggested by Woods (2005), will be discussed (globalization, technological development and social modernization) followed by an empirical section on the local socioeconomic outcomes of rural restructuring in Sweden.

Drivers of rural restructuring

**Technological development**

Recent technological development has had profound impacts on rural areas. Due to the large number of innovations it is, however, not possible to recapitulate all of them within the boundaries of this paper. Instead, a few with special relevancy for rural restructuring will be selected.

One invention with profound impacts on rural areas is refrigeration. Although the technology had been around for some time it was not commercialized until around 1900. Refrigeration made it possible to store food for long periods of time and to transport food all over the world. The potential market for agricultural products grew considerably which led to the development of large food processing companies and supermarkets. As the sales of agricultural products no longer depended on the local market, the pressure on farmers to specialize and engage in mass production grew. Apart from its direct effect on agriculture, refrigeration also affected the daily life of people in rural areas. The ability to store food for longer periods meant that people could shop less often, and in combination with better means of transportation, this meant that people in rural areas began to shop at supermarkets instead of more expensive local groceries. This development is one reason for the decline of service in rural areas (Woods, 2005, Page 31).

Another invention which fundamentally changed both production and living conditions in rural areas was, of course, motor vehicles. With increased personal mobility it was no longer necessary to live within walking distance of the workplace, which meant that people could live in rural areas while they worked in urban areas, something which stimulated counterurbanization. However, the daily distance which people are willing to travel was –and is still-- limited which means that the majority of counterurbanization
due to commuting is spatially limited to the vicinity of urban areas, something which has resulted in so called commuter belts around urban areas (Nutley, 1998).

However, although automobiles prompted counterurbanization motor vehicles also had the opposite effect on rural areas. With the introduction of tractors and harvesters, employment in agriculture fell dramatically and many people in rural areas thus had to look for employment elsewhere, especially in urban areas (Olmstead and Rhode, 2001). Employment in forestry was also hampered by motor vehicles. The introduction of trucks and trailers to forestry completely replaced log driving and timber rafting as methods of transport timber (Schön, 2012). Moreover, rationalization due to technological innovations in agricultural and forestry specific equipment led to a massive decline in employment. When chainsaws arrived in the middle of the 20th century forestry employment started on a downhill journey (Hjelm, 1991). Since then chainsaws have been replaced by forest machines which has reduced the workforce in forestry to an all-time low in relation to production. In a similar manner the milk machine replaced hand milking of cows reducing the employment demand in agriculture further (Schön, 2012).

However, although job losses within the primary sectors due to rationalization have been negative for the development of many rural areas, it should be pointed out that these jobs often were hard and took their toll on people’s health. Being a miner, a farmer, or a forester today (not to mention the extremely risky job of rafting timber) is a lot safer than it was 80 years ago.

Development in transportation has not only been negative for employment in rural areas, since in the last few decades international and intranational tourism have both increased considerably (Page, 1998). In some rural areas, tourism has become an important offset to the decline in agriculture and forestry. However, the majority of rural areas have not experienced an employment boom due to growth in tourism. One reason for this is that tourism depends on visitors actually traveling to a specific place which makes success in tourism very place bound (Lundmark, 2006, Pages 38–39).

The last invention with relevance for rural restructuring to be accounted for is telecommunication (Woods, 2005). Telephones, television and the internet have all contributed to reduce the isolation of rural areas. When the internet arrived, the expectations of its benefits for employment in rural areas were very high. Some scholars
even argued that the new modes of communication have resulted in the death of geography due to the space-time compression of information travel (Cairncross, 2001; Friedman, 2005). More reasonable views are, however, that geography is not dead; in fact, there are empirical studies suggesting that geography is more important than ever, at least in some aspects (Eriksson, 2009; Markusen, 1996). Nevertheless, it is still true that telecommunication has made it possible for companies dealing with information to locate in rural areas and for people in rural areas to work from home.

Telecommunication has also brought about cultural changes in rural areas. By watching television, listening to radio or surfing the internet people in rural areas receive the same cultural influences as people in urban areas, and in this sense the parts of the world with access to these amenities is truly flat. Partly as a consequence of similar cultural influences, the difference between rural and urban areas in terms of lifestyle and preferences has become much smaller (Woods, 2005, Pages 38–39). Louis Wirth’s (1939) famous account of Urbanism as a way of life from the beginning of the 20th century has become anachronistic in the 21st century. Today urbanism as a way of life has cut right across the rural-urban division and few non-urban lifestyles remain in the developed world.

Globalization
Viewed as the increased interconnection of localities around the world, globalization is a multidimensional phenomenon. Several aspects of globalization are relevant for rural restructuring, but of particular relevance is the globalization of the economy, globalization of regulations and the globalization of mobility (Woods, 2005).

Contemporary economic globalization has altered the conditions for economic activity in localities around the world. According to Woods (2005), there are three aspects of economic globalization with special relevancy for rural restructuring, these being, the globalization of trade, the rise of global corporations and the growing body of global regulatory frameworks.

Since the Second World War global commodity trade has seen a 17-fold increase with the traditional rural sectors of agriculture, forestry, fishing and mining constituting a significant part of the global exports (Bruinsma, 2003). With the globalization of trade, prices compete on an international level, which means that conditions for local
economic activity are governed elsewhere, partly removing local control over production. The primary sector is especially vulnerable to price changes on the world market which means that the world market has a direct effect on employment in rural areas. There are, for example, several cases where mines have shut down, not due to mineral depletion, but instead due to world market changes in mineral prices. The agricultural sector is likewise affected by changes in world market food prices (even though the EU and several nation states try to minimize the effect with economic barriers such as tariffs and by subsidizing the national agricultural sector). The globalization of trade has led to increased farm agglomeration and specialization; the reason for this is that farms no longer are dependent on local demand but can export their products to distant places (Woods, 2005, Page 35). A new system of agricultural production has thus developed with farms solely specializing in single products which maximize their output.

Due to national differences in wages in combination with low transportation costs, there is still both direct and indirect pressure towards relocation of unskilled production to low wage countries; directly when multinational companies relocate their production from high wage to low wage countries in order to increase profit, and indirectly due to the competition advantages of lower wage and cheaper products (Porter, 1986). However, it is mainly the secondary sector that suffers from direct relocation of production, since it is for obvious reasons harder to relocate production in the primary sector or the tertiary sector (natural resources cannot be relocated and only some IT based services can be relocated).

The second most important aspect of economic globalization, the rise of global corporations, affects rural areas most visibly by their influence on agriculture. With increased farm concentration, corporations with vast resources have emerged. For example, four corporations control large parts of the global seed market. In the United States three companies control 80% of maize exports and 65% of soybean exports (Hendrickson and Heffernan, 2002). Many of the large agricultural companies are furthermore cooperating with each other in order to increase control of the production chain. Hendrickson and Heffernan (2002) identify three global food clusters which are governed by the corporations Cargill and Monsanto, ConAgra, and Novartis and Archer Daniels Midland (ADM). These corporations are working with gene manipulation and
seed production (Monsanto, ConAgra and Novartis) and the processing of food from farmers (Cargill, ConAgra and ADM) which gives them control of the production within the food cluster. Furthermore, their control over food processing and their dominant role on the market gives them significant power to decide prices paid to farmers.

In the food retail sector, power is also concentrated in a few corporations; one example is Sweden where three corporations account for 88% of food retail sales in 2007 (Swedish Competition Authority, 2008). Similar to the large food processing corporations, the near monopoly in the food retail sector allow the leading food retail corporations significant influence over the price paid to farmers. Moreover, the development of brand products, which has increased steadily since the 1970s, has further augmented the food retail corporations’ influence over the production chain and the price paid to farmers. Apart from their direct effect on agriculture, large supermarkets in combination with increased commuting have forced many local stores in rural areas out of business reducing the service level and attractiveness of these places (Nutley, 1998, Page 188; Woods, 2005, Page 37).

However, it should be noted that the rise of global corporations and their relevance for rural areas is not solely limited to the agricultural sector; traditional rural sectors such as forestry and mining are also affected by this development. One example from Sweden is the forestry company Svenska Cellulosa Aktiebolaget (SCA) which in the 1960s was a regional company operating in the north of Sweden. Today the company operates on a global scale with units and production all over the world (Layton and Lindgren, 1992; Pettersson, 2002, Page 17).

The growth of global regulatory frameworks, which according to Woods (2005, Page 37) is the third most important aspect of economic globalization, reduces national influence over the economy. And since the rural economy to a large extent is dependent on exports they are certainly not an exception to the influence of global regulatory frameworks. Agriculture has been particularly debated; The World Trade Organization (WTO) wants to remove import tariffs on food and subsidies to farmers which is in direct opposition with the interests of both the United States and the EU to protect their agricultural sector with these methods. If the free trade alternative prevails, it will have direct negative effects for farmers that are dependent on subsidies and skewed
competition in the USA and the EU, and direct positive consequences for farmers in other, often poorer countries.

The deregulation of the economy which began in the 1970s in many western countries is also connected to the reduced national influence over the economy. In Sweden, deregulation increased drastically in the 1990s as a response to the economic crisis. According to Persson and Wiberg (1995) Sweden transferred power from the state to the municipalities during this period; a trend which has signified that declining municipalities find it harder to compete with their growing counterparts. Deregulation has also affected development of infrastructure and communications negatively in the more peripheral parts of Sweden (Pettersson, 2002, Pages 24–27).

The globalization of personal mobility, which springs from technological achievements and more open national borders, has also had significant effects on rural areas. Consider, for example, the tourism sector which has grown several times over in the last decades. Many rural areas have become attractive destinations for both national and international tourists, and for some of the areas, tourism comprises an essential part of the economy. Furthermore, the workforce within the tourism sector is hard to rationalize without compromising service quality which means that growth within the sector has led to considerable growth in employment opportunities (Lundmark, 2006, Pages 11–12). However, evidence from Sweden complicates the picture of tourism as the savior of employment opportunities in rural areas; as it turns out, a significant part of the workforce in tourism are seasonal migrants which reside in urban areas. This means that tourism contributes less to tax revenues and population growth than other sectors. The seasonal character of tourism also means that services and other activities may be forced to close during the off-season creating less attractive job opportunities (Lundmark, 2005).

Social modernization

Social modernization, in terms of values, higher education, secularization and consumerism, has changed rural areas in profound ways, both regarding employment structure, education, communities, households, demographics, and travel patterns. The mass increase of participation in higher education in the developed world has changed the life pattern of many young adults which has had consequences for rural areas. Not only does this mean that people in rural areas who have chosen to pursue higher
education must relocate to a university town, it also means that their prospects of employment in rural areas decrease due to the smaller amount of qualified jobs which makes it unlikely for them to move back. The increase in higher education is thus an important factor in explaining rural out-migration (McGrath, 2001; Pettersson, 2002, Page 23; Woods, 2005, Pages 31-32).

The globalization of culture has, as was noted above, made “urbanism as a way of life” the norm rather than the exception in contemporary rural areas (Amcoff, 2000, Page 22; Wirth, 1939). Furthermore, as with most forms of cultural change, young people are more prone to adopt them. Andersson, et al., (1997) argue that young people today increasingly have adopted post-materialistic values in which social relations, internationalism, education and work are important. From another angle, Ziehe (1994; cited in Pettersson, 2002, Page 23) argues that it is no longer possible for young people to walk in their parents’ footsteps, which has led to increased freedom for today’s youths, hence the changes in their values; intertwined with higher education, recent changes in values and beliefs have thus contributed to changes in the migration patterns.

Local outcomes of rural restructuring in Sweden

Socioeconomic changes

The natural resource sectors of agriculture and forestry are one of the first things that come to mind when the future of rural areas are discussed. This is especially visible in various policies for rural development, in Sweden and the EU where the majority of resources are directed towards development of the agricultural sector. However, in regards to employment, it is evident that agriculture and forestry are much less important for the vitality of rural areas. Between 1951 and 2007, employment in agriculture decreased 80%, from 869 440 to 177 615 people employed, even though the population in Sweden increased with 2.5 million people (see Figure 1). Between the same years agricultural production also increased on average with 42% despite the decrease in employment (Figure 2).
Figure 1. Workforce in agriculture, number of harvesters and number of tractors by year in Sweden (Data source: Board of agriculture, 2008).

Figure 2. Total crop production in Sweden by year 1921–2007 (Data source: Board of agriculture, 2008).

A major reason for this development was the spread of motor vehicles in the agricultural sector which increased production while reducing the demand for labor. In 1944 there

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1 Values have been extrapolated for some years due to lack of data.
were 417 harvesters and 24,993 tractors in Sweden, and by 1976 the numbers had increased to a highpoint of 49,489 harvesters and 188,838 tractors after which it began to flatten out due to the decrease in employment. In the years following 2000 there was almost one tractor for every employed person in agriculture (Figure 1). An intertwined reason for reduced labour demand and increased production was the concentration of agriculture which began in the 1940s. In 1940 65% of the agricultural land belonged to farms with less than 30 ha of land while 10% belonged to farms with more than 100 ha of land, in 2007 20% of total agricultural land belonged to farms with less than 30 ha and 45% belonged to farms with more than 100 ha of land--a trend that shows no sign of changing direction (Figure 3). Moreover, the global trade of agricultural products increased significantly forcing farmers in Sweden to compete internationally which has increased the pressure on rationalization. Figure 4 shows that the import of agricultural products has more than doubled since 1945, while the almost nonexistent export has increased several times over. Increased international competition means that farmers are exposed to fluctuating price changes due to happenings in other parts of the world. One example of this can actually be found in today’s news (2012-08-09); the report says that Swedish farmers are hard struck by a decline in milk prices--a decline caused by an overproduction of milk in Australia. At the same time they are also affected by the drought in the United States which has led to more expensive fertilizer (Sveriges Radio, 2012).

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2 The peculiar drop in import from 1996 and onwards in Figure 4 is only because the statistics do not include imports from the EU (Sweden became EU member in 1995). According to a report from the Swedish Board of Agriculture the import grew even more after Sweden entered EU (Data source: Board of agriculture, 2011).
Figure 3. Hectares by size of farm in percentages of total agricultural land in Sweden 1927–2006 (Data source: Board of agriculture, 2008)
The same pattern of rationalization, increase in production and international trade can be found in the forestry sector. Employment in forestry has decreased at a relatively steady pace for several decades. In 1972 the total work hours in forestry amounted to over 70 million while the same figure in 2011 was 26 million hours (Figure 5). Furthermore, although statistical data from earlier periods are lacking, it is reasonable to assume that the employment in forestry was much higher only a few decades before the 1970s due to more manual work methods. In the 1950s, the chainsaw revolutionized the forestry sector in Sweden as the yearly sales figure of about 600 chainsaws in 1948 increased to more than 15,000 in 1956 (Figure 6). The chainsaw eased several work-intensive steps in forestry labour and thus increased the productivity per worked hour and reduced the labour demand (Hjelm, 1991). Similar to the development in agriculture, production in forestry continued to increase despite the decline in employment; from a five year average of 50 million cubic meters from 1955 to 1959 to 88 million cubic meters during 2007 to 2011 (Figure 7). This development can only be explained by the technological development which has occurred in the forestry sector. Since the chainsaw’s arrival, technological development has only continued, and today

Figure 4. Sweden’s import and export of agricultural products by year 1930–2005 (Data source: Board of agriculture, 2008)
the chainsaw has been replaced by harvest machines which have reduced employment demand even further. Moreover, Sweden’s international trade with forestry products has doubled several times over in the last decades which has further increased the incentives to rationalize production. In 1970 the export of forestry products amounted to 35 billion SEK and in 2011 the figure was 1 199 billion SEK, a 34-fold increase since 1970 (Figure 8).

**Figure 5.** Total work time in forestry production in Sweden by year 1972–2011 (Data source: Swedish Forest Agency, 2012)
**Figure 6.** Number of sold chainsaws in Sweden 1948–1964 (Data source: Helgeson et al., 1979; cited in Hjelm, 1991)

**Figure 7.** Forestry production in Sweden 1955–2011 (Data source: Swedish Forest Agency, 2012)
In light of the rationalization that has occurred in the agriculture and forestry sectors it is no surprise that the employment structure in rural areas has undergone significant changes as well. Historically there has, however, been employment growth in two other sectors in rural areas, namely the manufacturing sector and the public sector. The growth of the manufacturing sector, usually thought of as an urban sector, in the first half of the twentieth century has also brought jobs to rural areas. Timber processing factories were, for example, often located in rural areas, and they provided jobs particularly in Northern Sweden. Modern industries like pulp, electricity and textile industries were also introduced, which contributed to some jobs in rural areas (even though these industries were more often located in urban areas).

The story of the Swedish manufacturing sector in terms of employment is, however, a rise and fall story. After the Second World War, and especially after 1970, the manufacturing sector experienced similar pressures on rationalization as the agriculture and forestry sector. Many manufacturing jobs in both rural and urban areas thus disappeared (Schön, 2012). However, between 1960 and 1980 there was a slight
relocation of Swedish industries from larger cities to peripheral areas, but the new industrial jobs gained in the periphery did not outweigh the employment decline in agriculture and forestry (Lundmark and Malmberg, 1988; Pettersson, 2002, Pages 16–17). Furthermore, relocation of industries to peripheral areas was most prevalent in southern Sweden, leaving the forestry-dominated parts of the northern inland vulnerable.

Parallel to the decline in agriculture, forestry and manufacturing the public sector grew considerably. In some rural areas, especially in the northern inland where manufacturing was weaker, the public sector with its employment in health care, elder care and other social services even became the largest employer. However, the economic crisis that struck Sweden in the 1990s forced cut-backs in the public sector rendering many people unemployed. These cut-backs struck rural areas extra hard, not only because of increased unemployment but also because of reduced accessibility to public services, especially in peripheral rural areas (Regionalpolitiska utredningen, 2000). Contemporary rural areas in Sweden have thus experienced a free-fall of employment in agriculture and forestry and a rise and decline (although not less dramatic) of employment in manufacturing and the public sector.

However, there are also examples of recent employment growth in rural areas. The tourism sector in Sweden has grown considerably in recent times, which has led to employment in many rural areas, especially in the mountain range of northern Sweden. Yet, tourism as an activity is very place bound and only comprises a significant part of the economy in a few places, whereas the majority of rural areas have not had an upswing due to tourism. Furthermore, evidence suggests that employment in tourism in Sweden to a lesser extent than other sectors has a local workforce; a significant part of the workforce is instead seasonal migrants from urban areas (Lundmark, 2005).

Another rural sector which has experienced recent growth (after a previous decline) is the mining sector. Even though the mining industry is exposed to the external pressures of globalization, technological development and rationalization, it is important for employment in some rural areas. A recent upswing in world market mineral prices has led to huge investments in peripheral areas in northern Sweden. On the other hand, the mining industry, like tourism, is extremely place bound which means that its effect on employment in rural areas is limited to only certain parts of Sweden. Mines also have a
limited life span due to mineral depletion and they are subject to dramatic fluctuations in world market prices. Furthermore, pressures on rationalization from technological development continue to push down employment. All of these things taken together makes mining viable only in some rural areas (Knobblock and Pettersson, 2010).

Up to this point the reader may wonder what people in rural areas are working with today. Part of the answer is that the unemployment rate has gone up in rural areas. In 1990, before the economic crisis and the decline in the public sector, 80% of the rural population between 18 and 65 was established on the job market, in 2008 this figure had declined to 70% (ASTRID, 2008). Another part of the answer is that people still are working in the sectors presented above; it is just that that the decrease in employment has been accompanied by population decline relative to urban areas. However, perhaps the most important part of the answer is that commuting has enabled people in rural areas to work in urban areas or in other distant, rural areas (Lewan, 1967; Sandow, 2011). In 2008, 32% of the working population in rural Sweden commuted to an urban area with more than 20 000 inhabitants and an additional 26% commuted to urban areas with 1 000 - 20 000 inhabitants (58% in total) (ASTRID, 2008). This means that the majority of people in rural areas actually work in urban areas, a spatial equation which is solved by commuting.

Due to the restrictions of space and time, commuting to an urban area is, however, limited to rural areas relatively close to urban areas, creating so called commuter belts around urban areas. Still, the range of the commuter belts has increased considerably during the past 60 years. In his study on rural change in Skåne, Lewan (1967) noted that the commuter belt in 1945 only ranged a few kilometers while in 1960 it had increased several times over. By extending the range of cities, commuting has thus transformed what used to be a production landscape into a residential landscape; morphologically the change is limited but the socioeconomic function is totally different.

According to Amcoff (2000), the most reasonable explanations for the increase in commuting are the steep increase of car ownership and the large investments in road

3 Rural areas are statistically delineated as areas outside "tätorter" and "tätorter" with less than 1000 inhabitants. "Tätort" is defined by Statistics Sweden as areas where distance between houses are less than 200 meters and population larger than 200 people.

Established on the job market = People with an annual salary larger than 120 000 SEK in 2008 currency.
infrastructure during the 1960s and 1970s. Needless to say, commuting has changed the employment structure in rural areas towards a more urban employment structure. Furthermore, with fewer jobs in the primary and tertiary sector the pressures to look for employment or higher education in urban areas increased, but with commuting it is not necessary to live in a city in order to solve this issue.

Changes in migration patterns
The restructuring of the Swedish rural economy described above is interrelated with the changes in migration patterns known as urbanization and counter-urbanization. It is, however, hard to generalize demographic changes in rural Sweden, since they have changed differently in different places. In his dissertation Johan Håkansson (2000) scrutinized the population distribution trends in Sweden. Between 1850 and 1930 the population showed signs of concentration on the local level but dispersion on the regional level (i.e. population in cities and villages grew in many parts of the country). The main factor behind this pattern is of course industrialization and the rise of the manufacturing sector; the localization of industries employing thousands of people took place all over the country causing local agglomeration of people. Between 1930 and 1970 the metropolitan regions began to grow relative to other regions changing the regional dispersion to regional concentration. According to Håkansson (2000), there were several factors in work to explain the concentration of the population, but the most relevant for rural restructuring was, however, the social modernization which took place during this period. The improvement of the Swedish welfare state during the 1960s reduced the need for families to take care of their elders and ultimately weakened communality between people. Weakened communality, in combination with the prevalence of the urban lifestyle in radio and television, the growth of higher education, and the decline of the primary sector explains, to a large extent, the urbanization phase that took place during this period.

In the 1970s a wave of counterurbanization took place with the population dispersing on the local level. The counterurbanization during this period has been called the “green wave” referring to the increased attraction of rural areas due to changes in people’s value systems (Håkansson, 2000). However, the 1970s was also the period when car ownership became widespread which enabled people to live in rural areas while working in urban areas. According to Amcoff (2000), the reduced geographical restraints on
resident location does a better job in explaining counterurbanization than a change in preferences because rural areas always have been attractive for people. The only change was that it was more practical to live in rural areas. In fact, the 1970s was the period when suburbanization and commuter belts grew rapidly allowing people more space for less money while keeping an urban lifestyle.

Since the 1980s both regional and local concentration has been the major trend while more peripheral rural areas have experienced population decline. Especially young adults have migrated to urban and metropolitan areas which have led to an ageing of the population in rural areas, causing fewer births and more deaths. Several municipalities in more peripheral parts of the country, like the Northern Sweden, have been severely hampered by this development (Figure 9).

On the contrary, many rural areas in the commuter belts surrounding urban areas experienced population growth, mainly due to immigration of families with young children (Håkansson, 2000). The map in Figure 10 on population changes in Sweden between 1990 and 2008 displays clearly that decreases in population have been most frequent in areas farther from larger cities, while areas close to larger cities in most cases have experienced population growth. Furthermore, although Northern Sweden as a whole has declined (Figure 9), the larger cities and their surrounding rural areas have grown (Figure 10). There are also some notable exceptions of population growth in the peripheral north to be found in the map which, according to Pettersson (2001), are mainly due to employment growth in the tourism sector.

One factor behind the concentration of the Swedish population is the decline of jobs in rural areas and the growth of jobs in urban areas. Another factor is commuting which has allowed people to live in the (more central) countryside, while working in an urban environment. Social modernization also has played a part-- since 1977 the number of students participating in higher education has more than doubled, from 177 000 to 441 000 students. This means that outmigration from rural areas due to education has increased and that the number of persons with restricted job opportunities in peripheral rural areas has increased dramatically (Figure 10).
Figure 9. Total population in Sweden’s five northernmost countries, the more peripheral part of Sweden, which is called Norrland 1968–2011 (Data source: Statistics_Sweden, 2012).
Figure 10. Difference map of population change in Sweden 1990-2008 in percent using SAMS-areas (Data source: ASTRID, 2008)
In combination with other cultural and economic factors this may also have affected the attitudes of young adults towards living in rural areas. In an interview study in the Swedish county of Västerbotten, Pettersson (2002) found that 41% of the respondents aged 15-18 living in rural municipalities had a desire to move from the municipality, at the same time only 24% of the respondents living in the city of Umeå had a desire to relocate to the countryside outside of Umeå municipality. On the other hand, 43% of the respondents living in the city of Umeå wanted to move to the countryside within the municipality of Umeå. Generalized to the Swedish population these findings confirm that peripheral areas are less attractive than central areas amongst young people in Sweden. However, the countryside close to urban areas is still attractive.

Conclusions

Rural areas in Sweden have undergone extensive changes during the past 60 years. By analyzing rural change in Sweden from a restructuring perspective these changes appear to be interconnected with each other and they also appear to be driven by technological development, globalization and social modernization.

However, it is important to mention one point regarding the methodology used in the report. The complexity and causal interconnectedness of rural change is assumed, but
not proven. In order to get more robust results on the workings of rural restructuring in Sweden a deductive quantitative approach is needed.

One may also note an interesting pattern in the data, namely that the restructuring process has had different outcomes in different places which have led to increased heterogeneity in rural areas. Commuting has increased the reach of cities into rural areas which has affected rural areas close to urban areas in ways that differ from more peripheral areas. Tourism has sprung up in hotspots, and increased employment in mining due to increasing world market prices are also place bound. On the other hand, before the decline of employment in agriculture and forestry, rural areas in Sweden were much more homogeneous, being either dominated by forestry, agriculture or a combination of both. The situation today is much more complex. Investigating the spatial distribution of social and economic phenomena in contemporary rural areas is therefore an important task for future research.

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